THE
LOUISIANA
STATE
UNIVERSITY
LIBRARY

BATON ROUGE

Digitized by the Internet Archive
in 2012 with funding from
LYRASIS Members and Sloan Foundation

http://archive.org/details/sugarbulletin19538amer

La. State University Library
Acquisitions Dept.
Baton Rouge 3,La.

LOUISIANA STATE UNIVERSITY LIBRARY

LIBRARY

# THE SUGAR BULLETIN

. 38 — No. 1 OCTOBER 1, 1959

*cial Bulletin of the American Sugar Cane League of the U. S. A.*

WARREN HARANG, JR.
Twentieth President of The American Sugar Cane League

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry

THE
# SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Edito

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

Issued on the 1st and 15th of each month. Subscription: Member 50 cents a year. Non-Members $3.00 a year.

Washington Office, 510 Union Trust Bldg., Washington, D. C.
Josiah Ferris, Manager

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
W. F. Giles, Jeanerette, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

# UP FRONT WITH THE LEAGUE

*by A. W. Dykers*

## A New President

The Annual Meeting of the Ameri-an Sugar Cane League was held on eptember 24th in the International oom of the Roosevelt Hotel, New rleans, just as we predicted it ould be in the September 15th issue f *The Sugar Bulletin,* and Warren larang, Jr., of Thibodaux, La., was lected President. Mr. Harang, whose icture is on the front cover of this ssue, succeeds Bronier Thibaut, of Napoleonville. He is the twentieth eague President.

Other League officers elected on he 24th were Ed. Schexnayder, of White Castle, 1st Vice-President; T. I. Barker, of Lockport, 2nd Vice-resident; Andrew P. Gay, of Plaq-emine, 3rd Vice-President; Josiah erris, of Washington, D. C., 4th ice-President: Gilbert J. Durbin, of ew Orleans, 5th Vice-President and eneral Manager; F. Evans Farwell, f New Orleans, Treasurer, and J. J. haffer, Jr., of Houma, Secretary.

Elected to the Board of Directors ere Thomas H. Allen, Franklin; P. . Billeaud, Broussard; H. K. Buben-er, Bunkie; W. S. Chadwick, New Orleans; J. P. Duhe, Jeanerette; Murphy J. Foster, Franklin; W. F. Giles, Jeanerette; F. A. Graugnard, Jr., St. James; John B. Levert, New Orleans; Clifford LeBlanc, White Castle; Earl G. Luke, Franklin; Richard McCarthy, Jr., New Orleans; E. W. McNeil, Cinclare; J. J. Munson, Houma; Charles C, Savoie, Belle Rose; Bronier Thibaut, Napoleonville; James H. Thibaut, Donaldsonville; Ivan M. Wilbert, Plaquemine; Horace Wilkinson III, Port Allen, and M. V. Yarbrough, of Youngsville.

Elected honorary members of the Executive Committee were L. A. Borne, of Raceland; Wallace C. Kemper, of New Orleans, and David W. Pipes, Jr., of Houma, La.

## Happy People

The 1959 Sugarcane High Yield Winners were feted at a luncheon immediately preceding the Annual Meeting. The affair was under the auspices of the American Sugar Cane League and the Agricultural Extension Service of L.S.U. Everybody seemed to have a good time but probably the two happiest people at the

(Continued on page 8)

## *In This Issue*


Up Front With The League ..... 3
**A New President—Happy People—High Yield Winners—Tax Exemptions**
In The Field With Lloyd L. Lauden ..... 4
**Crop Prospects**
In Washington With Joe Ferris ..... 5
Address By President Bronier Thibaut At The Annual Meeting, September 24, 1959 ..... 6
Pictures Of Recipients Of High Yield Awards ..... 9

# IN THE FIELD WITH LLOYD LAUDEN

*by Lloyd L. Lauden*

## Crop Prospects

Although it is impossible to predict with any degree of accuracy what any Louisiana cane crop will produce before the harvest is completed and the sugar is in the bag, this article will attempt to do that very thing. In evaluating the condition of the crop by areas it must be remembered that within every area there are exceptions to the general crop condition. There are some excellent crops in all areas as well as some poor crops in all areas.

As the harvest draws near there are stronger indications that this crop will be a good one both from the standpoint of cane per acre as well as pounds of sugar per ton.

The crop in the Western Area is better than it has been in several years. The crop on the Lower Mississippi River Area appears better than the crop of last year. The Upper River Area and the Northern Area crop should equal or better last year's crop in tons of cane per acre. The crop on Bayou Lafourche appears spotty, some real good cane and some relatively poor cane; but in general, the upper end of the Bayou should produce slightly better yields of cane than were produced there last year, with the lower end dropping slightly under last year's per acre yield. The crop in the Terrebonne Area should be equal to or produce just slightly under last year's per acre yields for the area.

This writer estimates that Louisiana mills will grind about 5,700,00 net tons of cane from approximatel 248,000 acres, for an average o about 23 tons of net cane per acre Last year Louisiana mills groun 4,868,908 tons of net cane and pro duced an average of 22.2 net tons o cane per acre from 219,144 acres.

There is a good possibility tha this crop will be both early and hig in sugar. Frequent rainfall through out the growing season has kept th root system of the cane plant on th surface of the soil. Cool, dry weathe for the harvest will force the plan into maturation. This same situatio occurred last year.

Another factor working in thi crop's favor for producing good earl sugar is that most of the nitroge has either been used by the plant o leached from the fields and thi should lessen late growth in the even of warm weather during harvest This has been noticeable for at leas one month. Cane fields appear ol now. There are many brown leave high on the plant. Cane stalks hav a matured color and appearance.

In the opinion of the writer thi crop has a good chance of producin as much sugar per ton of cane as th 1958 crop produced. It is estimate that this crop will produce abou 510,000 tons of sugar raw value, giv or take 5,000 tons. Last year Louisi ana produced 443,000 tons of sugar raw value.

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*

Curious Washingtonians turned ut in goodly numbers last week to vitness the arrival of the World's umber one Communist and his reti- ue. The Russian Premier was re- eived without any display of en- husiasm, no flag waving, no cheer- ng, only curiosity. The people in the rowds simply wanted to see what Krushchev looked like and having een they turned away and silently roceeded with business as usual.

One of Chairman Krushchev's first cts here was to visit the U. S. De- artment of Agriculture's Beltsville esearch center where Secretary of griculture Benson and his staff put n a splendid show. They let their ussian visitors see a newly discov- red pigment in plants which scien- sts say regulates all growth from eed germination through fruiting. t was explained to Mr. Krushchev nat this discovery will permit scien- sts to control the height of the lant, the time of blossoming, ma- urity of fruit and to even make the eeds germinate at times most con- enient to the farmer. Krushchev vas shown the Department's prize Iolstein-Fresian cows which produce p to 18,000 pounds of milk per ani- nal and as much as 724 pounds of utterfat. He was told about pre- mergence killing of weeds in cotton ields with diuron; in corn, with si- nazin and the new herbicide, 4-(2, -DB) which can be applied to both ereal crops and legumes without in- ury to either crop but will kill all road leaved weeds. He was shown n ultrasonic device which is being developed to send silent sound waves through animals to measure the thickness of fat and the amount of meat. After seeing those and many other interesting and unusual agri- cultural exhibits Mr. Krushchev did not boast, as usual, that the Russians are way ahead of us.

---

The United States Sugar Corporation is ready to begin harvesting its largest crop of sugarcane October 19, unless weather prevents. Mr. Harry T. Vaughn, President, said the crop, the biggest in the Corporation's history both in acreage and in tons of cane, will be ready for the cane cutters on October 19 and he hopes to have the sugarhouse in operation the following day. Heavy rains have muddied fields and have softened roads, Mr. Vaughn said, but a few sunny days in early October should dry them out enough for movement of the heavy machinery and vehicles required in the harvesting operations. U. S. Sugar Corporation's mill at Clewiston, Florida, is the largest cane sugar mill in continental United States.

---

B. W. Dyer & Company, New York sugar brokers, are soliciting nominations from members of the sugar industry to select the "Sugar Man of the Year" for 1959, the second Dyer Memorial Award. Nominations must be received by B. W. Dyer & Company, not later than January 8, 1960. The purpose of the award is to give recognition to some sugar man mak-

(Continued on page 8)

# ADDRESS BY PRESIDENT BRONIER THIBAUT AT THE ANNUAL MEETING, SEPTEMBER 24, 1959

Members of the American Sugar Cane League and our distinguished guests.

Today marks the completion of my second term as your President. The two years that have passed since you did me the honor of elevating me to this high position have been very pleasant ones, thanks to your fine cooperation. We have, of course, done some things which we should not have done, and, perhaps, left undone some things which we should have done. However, I believe that our good works have been more frequent than those that were not so good. We believe that the steady advance of the Louisiana sugar industry has been helped, at least a little bit, by our actions and our decisions.

Looking back over the events since our last report, by far the most significant development has been the lifting of acreage allotments; first for the 1959 crop and again for the 1960 crop. The decision by the USDA to ease acreage restrictions on the 1959 crop came out on March 4th which was too late for many of us to do much about it. Some stubble that would have been plowed out was kept for use at the harvest but, unfortunately, many farmers had already finished plowing out their over-acreage cane. This year's Louisiana cane crop is still a restricted one despite the March 4th order.

We did much better in our fight to have no acreage restrictions on the 1960 crop of sugaracne. An order was issued in Washington on May 25th lifting all acreage restrictions on mainland cane for the 1960 crop and we are now in the midst of the first unrestricted planting season that Louisiana has enjoyed since the fall of 1952. Right now it seems very probable that there will be no restrictions on the 1961 crop. It is highly possible that the 1962 crop will be unrestricted also. For this we must give thanks to the 1956 amendments to the Sugar Act which allow us to participate in the increase in sugar consumption in this country and also to participate in the re-allocation of deficits from other domestic areas.

We are now starting to reap the full benefits of our all-out efforts in 1956 to amend the Sugar Act. The good work of Joe Ferris in Washington, together with Gilbert Durbin and the tireless efforts of Wallace Kemper and the Legislative Committee of the League, are now paying dividends in the form of increased quotas for the Louisiana industry. The 1959 mainland sugar quota at the present time is 684,737 tons, an increase of 184,737 tons over the fixed 500,000 ton quota that was ours before the law was changed in 1956.

Another very important development of the past two years has been the industry-wide acceptance of endrin to control the cane borer. The use of this chemical was endorsed by the USDA and LSU Experiment Stations and actively pushed during the past two seasons by our field agronomist, Lloyd L. Lauden. The results haev been very satisfactory. Endrin when properly applied, will reduce borer damage to a minimum, and result in more tons of cane per acre. This means additional money in the bank for the cane farmer.

Continuing to list the developments in the line of their overall importance to the industry, we call attention to the substantial reductions in railroad freight rates on sugar that went into effect last season and will continue this year. The reduced rail rates will result in a higher price to the grower for his cane, as the mills share the resulting saving in freight rates with their growers. The American Sugar Cane League through its Freight Rate Committee has not only successfully opposed repeated attempts by the railroads to

crease freight rates on sugarcane, ut actually has prevailed on the ailroads to reduce their rates on sug-r. This, we insist, is quite an ac-mplishment.

The League's attorney, Paul Bor-n, Jr., has been the guiding light the freight rate fight and I am ure everyone will agree that he as done an excellent job, not nly in freight rates, but in all of ne many and diverse ways that his utstanding legal talent has been em-oyed to protect and promote the elfare of the Louisiana sugar in-ustry.

The work in cane breeding and the esting of new cane varieties has een given added impetus by a new rossing house at Canal Point, a new reen house at the Houma USDA tation, and the acquisition of addi-onal acreage for testing new cane arieties by LSU. The developing nd testing of new cane varieties is ne life blood of our industry. League unds are augmenting Federal and tate appropriations to assure the ontinued expansion of this very nec-ssary work.

All of us are aware, of course, that new strain of mosaic disease has eared its ugly head in our cane fields uring the past two years. Right ere I want to express appreciation f the very fine job that the Agri-ulture Extension Service of Louisi-na State University has done in eaching us to recognize this disease nd check its spread by roguing. Vith their help, and the help of the SDA and LSU Experiment Stations, e are confident that our industry ill avoid a repetition of the dark ays of the late twenties when mosaic isease almost completely destroyed s.

Our organization has been success-ul in having the State Legislature ppropriate funds to employ a plant hysiologist at LSU who will devote is entire time to sugarcane. Also hrough the efforts of the League, xperiments on grass and weed con-rol in sugarcane are scheduled to begin at the USDA Houma Station.

The American Sugar Cane League, through its Trash and Cane Handling Committee, has continued to encourage work on cane combines. Last year the Cary Cane Combine received extensive trials in Louisiana and Florida. Work with this machine will continue throughout the coming harvest. Scheduled also for trial this year is a new machine developed by Mr. S. A. Thornton. Southdown and South Coast supplied the necessary funds to Mr. Thornton to build this machine last year, but unfortunately, it was not made ready for field trials last season. This year it will be put to the test in field operations.

Still another experimental cane combine will be built by J. & L. Engineering Co. The Association of Sugar Producers of Puerto Rico and the Puerto Rican Government are financing this research. Fortunately for us in Louisiana, this cane combine will first be tested in our cane fields.

Work is also being continued on the U.S.D.A. cane combine at Houma. The League's Farm Machinery Committee cooperates with the U.S.D.A. on this project.

Thomson Machinery Co. is also continuing its efforts to improve our cane harvesting equipment.

There are, of course, many other activities of the League that I have not touched upon. Time does not permit a complete chronicle of the tasks undertaken and the successful accomplishments of the sixteen standing committees, and the many other specially appointed committees of the American Sugar Cane League. I am sure, however, that each of you join with me in thanking each member of each committee for their unselfish service to our industry. I know, too, that you join me in thanking the employees of the League for their very fine cooperation during the two years that I have served as your President.

It is inevitable that as time marches on some of us will fall by the way-

(Continued on next page)

side. The pages of the Sugar Bulletin report the deaths of such outstanding leaders as Elliott Jones, Ernest Burguieres, Leon J. Landry, M. L. Marquette, and Louis Caillouet during the twelve months under review, but other League members equally important to their families and to their communities have joined them in the Great Beyond.

To honor the memory of the members of the American Sugar Cane League whom God, in His infinite wisdom, has seen fit to take from us, please stand for a moment of silent meditation.

In conclusion, may I again say that it has been a great pleasure to be the President of this very fine organization. Your help and understanding has been greatly appreciated and I can think of no better wish for my successor than that he will be as happy serving you as I have been.

Thank you very much.

—o—

## IN WASHINGTON

(Continued from page 5)

ing a significant or meritorious contribution to the sugar trade—particularly a new idea or development. The first eligible person to nominate in writing the award winner who is selected will receive $50. The award winner must be part of the U. S. sugar economy. The First Dyer Memorial Award went to Ernest W. Greene, President of Sugar Association, Inc., who until his retirement was for many years Washington representative of the Hawaiian Sugar Planters Association.

—o—

## UP FRONT

(Continued from page 3)

luncheon were Mr. and Mrs. Sidney Hebert, Jr., of Broussard. Their son, Sidney Hebert III, was the winner of the 4-H Club sugar cane project. Sidney seemed pretty happy, too, especially when he was presented a League check for $150.00 as a prize for being such a good farmer. He averaged 35.9 tons of cane per acre. Later this year Sidney will represent Louisiana sugar at a big 4-H club gathering in Chicago, using the prize to finance the trip.

### High Yield Winners

Elsewhere in this issue we are printing the pictures of the High Yield Awards winners of 1959. This year, as always, the sugar belt was divided into five districts and each district was divided into five farm size groups. District 1 consists of Vermillion, Lafayette and St. Martin Parishes. The winners were Michel Douet of Breaux Bridge and Lloyd P. Broussard, of Abbeville, tied with 35.5 tons of cane per acre in the 5 to 49.9 acre group; Moise Albert, of St. Martinville in the 50 to 99.9 acre group who averaged 28.6 tons of cane per acre; Expadie Laperouse of St. Martinville, in the 100 to 199.9 acre group who averaged 33.5 tons of cane per acre; W. J. Bernard in the 200 to 499.9 acre group, who averaged 30.6 tons of cane per acre; and Levert-St. John, Inc., who averaged 23.5 tons of cane per acre in the 500 and above acre group.

The winners in District 2, Iberia and St. Mary Parishes, were Fred Viator, New Iberia, 42.4 tons of cane per acre in the less than fifty acres group; Nicholas Paul, Franklin, 36.8 tons of cane per acre in the 50 to 99.9 group; Andrew Gonsoulin, New Iberia, 36.6 tons per acre in the 100 to 199.9 group; J. Malcolm Duhe, New Iberia, 36.5 tons of cane per acre in the 200 to 499.9 group; and Sterling Sugars, Inc., Franklin, 29.8 tons of cane per acre in the 500 acres or above group.

Assumption, Lafourche and Terrebonne parishes are District 3. The winners in this section of the sugar belt were Ruffin Bergeron, Jr., Gibson, 46 tons of cane per acre in the less than fifty acre group; Leroy and Paul Zeringue, Raceland, 38.9 tons of cane per acre in the 50 to 99.9 acre group; Charles and Euel Zeringue, Raceland, 37.8 tons of cane per acre in the 100 to 199.9 acre group; and Michell P. Brien, Houma, 35.3 tons

(Continued on page 14)

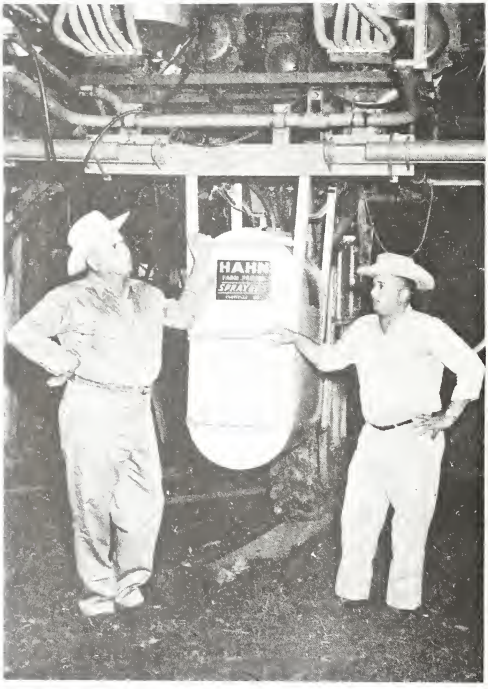
Miques and Lloyd P. Broussard, Abbeville, La.

Henry Jarreau, Oscar, La.

Michel Douet, Breaux Bridge, La.

J. G. Beaud, New Roads, La.

Major Brothers, New Roads, La.




Nicholas Paul and Andrew Paul, Franklin, La.

J. Malcolm Duhe, New Iberia, La.

W. J. Bernard, Cade, La.

E. Rayne and Raymond Becnel,
Edgard, La.

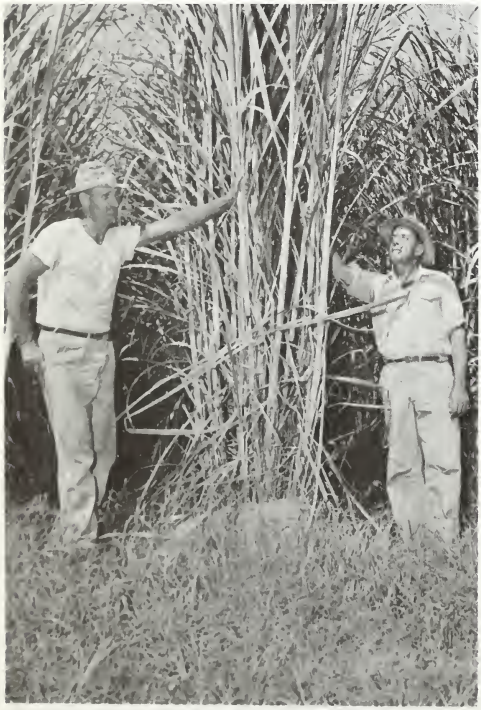
Fred Viator, New Iberia, La.

Norman Boudreaux, St. Martinville, La.
Levert-St. John, Inc.

S. J. Caire, Jr. and Bernard Becnel,
Edgard, La.

Ruffin Bergeron, Jr., Gibson, La.

Eddie Hymel, White Castle, La.

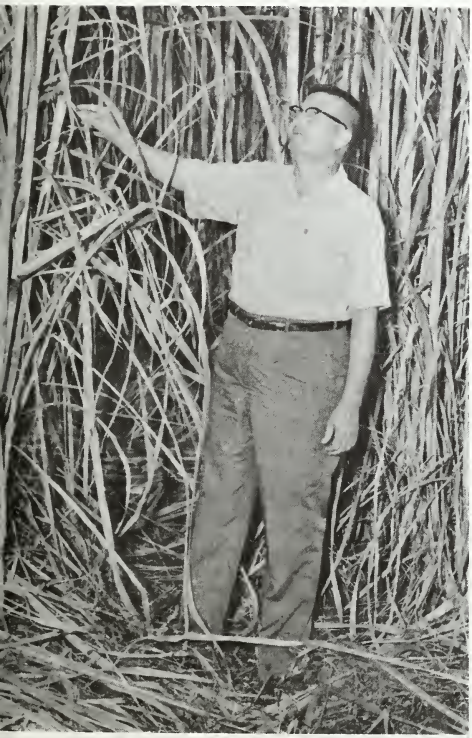


Charles and Euel Zeringue,
Raceland, La.

Michael Martin, Paulina, La.

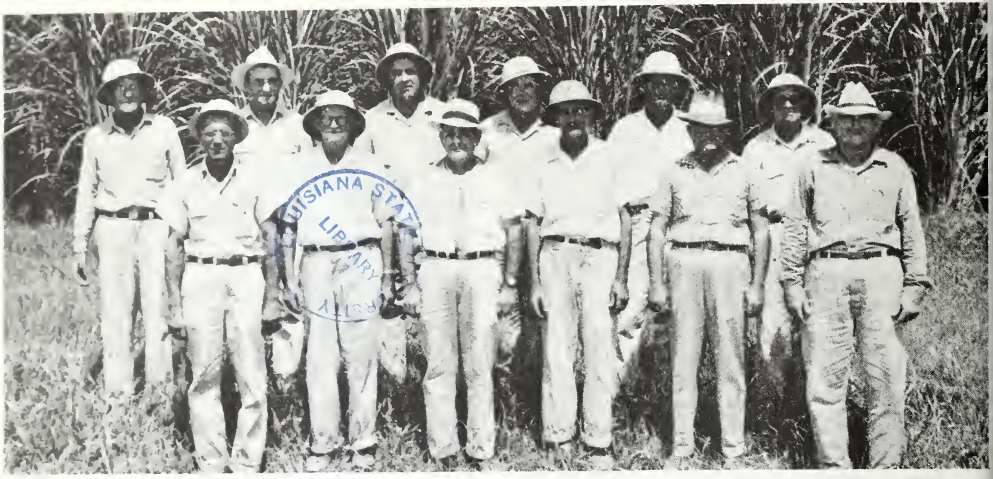
Leroy and Paul Zeringue,
Raceland, La.

Expadie Laperouse, St. Martinville, La.



John Best, Lobdell, La.

M. P. Brien, Houma, La.



Sterling Sugars, Inc. Franklin, La. (Left to Right front row: Blanco, Olivier, Walt Sennet, Fuqua, Doug Sennet & Robichaux. Back row: left to right: Arbeneaux, Guillot, Roland Stroud, Theo Stroud, Jeff and Frank Blanchard.

Eddie Landry, LaBarre, La.

## UP FRONT

(Continued from page 8)

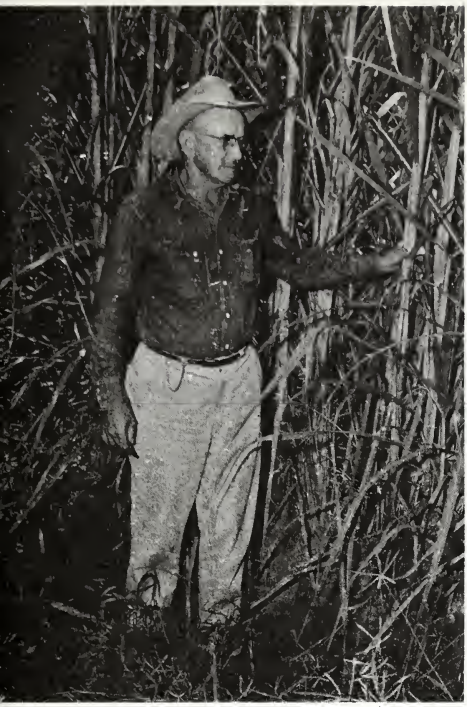
of cane per acre in the 200 to 499.9 acre group.

There was no winner in the 500 acres or above group in District 3 because in order to qualify a grower had to produce 30.8 tons of cane per acre and no large plantation in the group came up to this average.

In District 4, Ascension, Iberville, St. Charles, St. James, St. John, and West Baton Rouge Parishes, the winners were Michel Martin, Paulina, 37.2 tons of cane per acre in the less than 50 acre group; the Estate of Elmire W. Webre (Etienne Rayne, Edgard, Manager) and Eddie Hymel, White Castle, tied for first place in the 50 to 99.9 acre group with 38.2 tons of cane per acre; Estate of Etienne J. Caire (S. J. Caire, Jr., Edgard, Manager) 35.7 tons of cane per acre in the 100 to 199.9 acre group; F. H. Carruth, Jr. (John Best, Lobdell, Manager) 36 tons of cane per acre in the 200 to 499.9 acre group; and the Poplar Grove Planting and Refining Co., Port Allen, 37.2 tons of cane per acre in the 500 and over acre group.

District 5 is Avoyelles, Pointe Coupee, Rapides, St. Landry and West Feliciana Parishes. The winners were Henry Jarreau, Oscar, in the less than 50 acre group who averaged 37.7 tons of cane per acre; Eddie Landry (Provosty Farm) La Barre, 30.5 tons of cane per acre in the 50 to 99.9 acre group; Albin and Oliver Major, New Roads, 32.2 tons of cane per acre in the 100 to 199.9 acre group; Joseph G. Beaud, New Roads, 30.6 tons of cane per acre in

(Continued on page 16)



Moise Albert, St. Martinville, La.

Horace Wilkinson, Port Allen, La.

KEEP MORE PROFIT

BIG N

FOR YOURSELF!

Big N ammonia is 82% nitrogen and 100% available. Goes to work immediately. Heavier, more profitable crops.

•

New Iberia phone EM 4-4191
Available at our plants:

PATOUTVILLE
NEW IBERIA-LOREAUVILLE

MID-SOUTH CHEMICAL CORPORATION

1222 Riverside • Memphis, Tenn. • WHitehall 6-1632

FARMER CITY, ILL. • HARLINGEN, TEXAS • LAKE CHARLES, LA. • MT. VERNON, IND. • NEW IBERIA, LA.

## UP FRONT

(Continued from page 14)

the 200 to 499.9 acre group.

District 5 had no winner in the 500 or over acreage group. In order to qualify a farmer had to average 26.1 tons of cane per acre on more than 500 acres and no one accomplished this production.

From the above listings it will be noted that the winners by acreage groups regardless of locations were Ruffin Bergeron, Jr., Houma, in the less than 50 acre category with 46 tons of cane per acre; Leroy and Paul Zeringue, Raceland, in the 50 to 99.9 acre group with 38.9 tons of cane per acre; Charles and Euel Zeringue, Raceland, in the 100 to 199.9 acre group with 37.8 tons of cane per acre; J. Malcolm Duhe, New Iberia, in the 200 to 499.9 acre group with 36.5 tons of cane per acre; and the Poplar Grove Planting and Refining Co., Port Allen, in the more than 500 acre group with 37.2 tons of cane per acre.

### Tax Exemptions

In the September 1st issue of *The Sugar Bulletin* we called attention to an opinion rendered the League's attorney by the legal division of the State Department of Revenue relative to the exemption of repairs to farm and mill machinery from the State sales tax. Since the opinion was published there have been many requests for clarification of the opinion as it would apply to individual cases.

The Executive Committee of the League has requested its attorney to get all the information he can on this subject from the Louisiana Sales Tax Division and we hope to be able to have more to report relative to the tax exemption in the next issue of *The Sugar Bulletin.*

*"Sugar Factory Insurance Specialists"*

**GILLIS, HULSE and COLCOCK, Inc.**

839 Union St. New Orleans, La.

Telephone JA 2-1225

**Commercial Members of the AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC.**

AMERICAN CYNAMID CO.
30 Rockefeller Plaza
New York, N. Y.

AMERICAN MOLASSES CO., OF LOUISIANA, INC.
400 N. Gayoso St.
New Orleans, La.

HARRY L. LAWS & CO., INC.
126 Carondelet Street
New Orleans 12, La.

THE HIBERNIA NATIONAL BANK
New Orleans, La.

LAMBORN & COMPANY, INC.
Carondelet Building
New Orleans, La.

LEBOURGEOIS BROKERAGE CO.
823 Perdido Street
New Orleans, La.

THE NATIONAL BANK OF COMMERCE
New Orleans, La.

PENICK & FORD LTD., INC.
National Bank of Commerce Bldg.
New Orleans, La.

ESSO STANDARD OIL COMPANY
(Louisiana Division)
P. O. Box 1250 New Orleans 10, La.

STANDARD SUPPLY & HARDWARE CO., INC.
822 Tchoupitoulas St.
New Orleans, La.

STATE AGRICULTURAL CREDIT CORP., INC.
837 Whitney Building
New Orleans, La.

WHITNEY NATIONAL BANK
New Orleans, La.

La. State University Library
Acquisitions Dept.
Baton Rouge 3,La.

LOUISIANA STATE UNIVERSITY
CHEMISTRY
LIBRARY

# THE SUGAR BULLETIN

LOUISIANA STATE UNIVERSITY
LIBRARY

38—No. 2 OCTOBER 15, 1959

*ial Bulletin of the American Sugar Cane League of the U. S. A.*

PRINTED ON PAPER MADE FROM
LOUISIANA SUGAR CANE BAGASSE

## *In This Issue*

Up Front With The League ..... 19
**Sales Tax Exemptions—Determinations—Quotation Committees—Sugar Committee—Blackstrap Committee**

In The Field With Lloyd L. Lauden ..... 20
**Promising Unreleased Varieties**

In Washington With Joe Ferris ..... 21

Wage Rate Determination ..... 22

Sugar Market Statistics Through October 10, 1959 ..... 26

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry

# THE SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Editor

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

**Issued on the 1st and 15th of each month.** **Subscription: Member 50 cents a year. Non-Members $3.00 a year.**

**Washington Office, 510 Union Trust Bldg., Washington, D. C.**
**Josiah Ferris, Manager**



**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
W. F. Giles, Jeanerette, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.


*We stand for the encouragement of Home Industries as against Foreign Competition*

# UP FRONT WITH THE LEAGUE

*by A. W. Dykers*

## Sales Tax Exemptions

In *The Sugar Bulletin* of September 1959 there was published an opinion ndered by the Legal Division of e State Department of Revenue in- cating that the Louisiana sales tax not applicable to amounts paid for rtain repairs. As the opinion inted out, the tax is not due on pairs to immovable property. When owner of a tract of land places achinery, equipment or other mov- le property on his land for the rvice and improvement of the land, ch movable property becomes im- ovable by destination. The tax is t due on repairs to immovables by stination.

Since the publication of the opin- n, numerous questions have been esented concerning repairs of rious types. Therefore the League s submitted to the Legal Division the Department a list of questions, e answers to which should be of sistance in clarifying most of these oblems.

The questions submitted and the swers approved by the Department e as follows:

1. Q. Does the exemption apply to repairs to a factory or to factory machinery, as well as to repairs to farm implements and machinery which have become immovable by destination?
   A. The exemption does apply. The tax is not due on the furnishing of repairs to immovable property, either by nature or by destination.
2. Q. Do "repairs" include the total charge for such repairs, including labor, material and parts?
   A. Yes. The sales tax is not due on the total charge for such repairs, including labor, material and parts. However, the repair shop which furnishes the repairs is obligated to pay the two per cent tax on its cost of any parts or material used in making the repairs.
3. Q. In applying the exemption, is there any difference between repairs performed on the property of the owner and repairs performed at the shop of the Repairer?
   A. There is no difference.
4. Q. If an owner purchases parts or material to repair his own equipment or machinery which is immovable by destination, does the exemption apply to the price paid for the parts?
   A. The exemption is not applicable.
5. Q. If an owner has a part made or manufactured by a foundry for use in repairing an immovable, does the exemption apply to the foundry's charges?
   A. The exemption is not applicable.
6. Q. What type of service should be considered to be "repairs"?
   A. There is no definition of "repairs" in the sales tax statute. The Department applies what may be consid-

(Continued on page 26)

# IN THE FIELD WITH LLOYD LAUDEN

*by Lloyd L. Lauden*

Two new promising unreleased varieties were transferred to the 48 secondary increase stations in the sugar belt last week. These varieties, C. P. 55-14 and C. P. 55-30, looked good in the three primary increase stations as well as in the 12 test fields throughout the belt. About 500 lbs. of each variety was given to each of the 17 secondary increase stations in the Western Area. This may appear to be a small amount of cane of a new variety to transfer, but this was the total amount available at the Hope Plantation primary station for the area. The seed will be increased at as rapid a rate as possible. Approximately 1000 pounds of C. P. 55-14 and about 400 of C. P. 55-30 were given to each of the 15 secondary increase stations along the Mississippi River and in the Northern Area. This was the total amount of seed of both varieties at the Smithfield Plantation primary station. The Southdown primary station delivered approximately 1300 pounds of each of the two varieties to each of the 16 secondary increase stations along Bayou Lafourche and on the Lower River Area.

C. P. 55-14 yielded more cane per acre than C. P. 55-30 at all three primary stations. The variety C. P. 55-14 was taller; the diameter of the stalks was larger, and the tops were much better than C. P. 55-30. Secondary station co-operators were greatly impressed with the appearance of C. P. 55-14 both with the length and diameter of the stalks.

These varieties have been carefully attended while on primary increa stations and have been checked ma times for stunting disease and rogu for mosaic disease five times. Th cane was watched closely while bei cut for presence of mosaic disea and many stalks were checked f stunting disease the day of transfe Secondary stations were asked plant this seed in land free of Joh son grass and away from mosaic i fected cane. Both varieties have be heat-treated and it is hoped that bo varieties will remain clean of stur ing disease. Growers are remind that these two varieties can be se at any time on any of the 48 secon ary stations.

If the test field studies continue show that these varieties are goo there should be a sufficient amou of seed to release in 1961 or in 196

The variety C. P. 53-1 which w transferred to secondary stations la year is still being increased, but t variety is very susceptible to stur ing disease. It is only being increas where it can be again heat treate Where it is clean of stunting disea it is very pretty. A small amou will be milled this year in order get milling and clarification inform tion on the variety.

Growers are again reminded th the part the test fields, primary st tions, and secondary stations pl is a very important one to the wh industry. The station operators gi much time and money to this part the variety program. Much labor required to hand cut and make sm

(Continued on page 26)

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*

Slator M. Miller, Vice President d Washington representative of e Hawaiian Sugar Planters' Asso-ation has been transferred to the incipal office of the HSPA in nolulu.

Mr. Miller will be replaced in ashington by Sanford L. Platt, esent HSPA Secretary. The anges in assignments, according to r. A. G. Budge, HSPA President e expected to take place by the end this year.

Mr. Miller's duties in Hawaii will as Vice President and Secretary, d Mr. Platt will become Vice Presi-nt in charge of HSPA's Washing-n office.

In announcing the change in the administrative positions, Mr. dge said they were made in view the completely new status of Ha-ii in the Congress which will call close liaison on legislative mat-s between the principal office of e Association in Hawaii and the pitol.

Mr. Miller, who has been with the awaiian sugar industry since 1928, ceeded Ernest W. Greene in July, 56 as Vice President and Washing-n representative. He had been serv-g as Assistant Vice President in e Washington office since 1951. om 1947 to 1951 Miller was HSPA cretary and head of the Hawaii fice. Mr. Platt has been Secretary the HSPA in charge of the Hawaii office since August 1954 when he succeeded Robert R. Trent. He had been assistant Secretary of the Association from 1949 until that time.

Mr. Platt has been active in community service, including the Territorial Advisory Council of the Bureau of Employment Security, the Honolulu Symphony Society, the U. S. Savings Bond Committee, the Appeals Review Board of Honolulu and the Pacific and Asian Affairs Council. He is a member of Phi Gamma Delta, the Pacific Club, the Oahu Industrial Relations Association, and the Chamber of Commerce of Honolulu. He is a graduate of the University of Oregon.

Before becoming HSPA Secretary Mr. Miller served with the Association in the Philippines and also on the staff of the HSPA Experiment Station. He was Head Overseer at Kaiwiki Sugar Company, and General Field Superintendent at Ewa Plantation Company before taking over the newly formed Industrial Relations Department of the HSPA in 1944.

Both Mr. and Mrs. Miller have a host of friends in the Washington area who will be saddened by their departure.

Mr. Platt is well known in Washington and will be heartily welcomed by the domestic sugar representatives here.

# WAGE RATE DETERMINATION

Pursuant to the provisions of section 301 (c) (1) of the Sugar Act of 1948, as amended, (herein referred to as "act"), after investigation, and consideration of the evidence obtained at the public hearing held in Thibodaux, Louisiana, on July 30, 1959, the following determination is hereby issued:

§ 864.7 *Fair and reasonable wage rates for persons employed in the production, cultivation or harvesting of sugarcane in Louisiana.* (a) *Requirements.* A producer of sugarcane in Louisiana shall be deemed to have complied with the wage provisions of the act if all persons employed on the farm in production, cultivation or harvesting work shall have been paid in accordance with the following:

(1) *Wage Rates.* All such persons shall have been paid in full for all such work and shall have been paid wages in cash therefor at rates as agreed upon between the producer and the worker, but not less than the rates specified below.

(i) *For work performed on a time or piecework basis:*

Class of Worker or Operation

| Harvest work | Rate Per Hour |
|---|---|
| Cutters, toppers, strippers and scrappers behind loaders | $ .65 |
| Loaders, spotters, ropemen, grabmen, and teamsters | .70 |
| Cutters and loaders, pilers, and hoist operators | .65 |
| Tractor drivers, truck drivers, and harvester bottom blade operators | .75 |
| Operators of mechanical loading or harvesting equipment | .80 |
| All other harvesting workers | .60 |

| | Rate Per Ton |
|---|---|
| Cutting top and bottom: | |
| Large barrel varieties [1] | $1.10 |
| Small barrel varieties [2] | 1.30 |

| Production and Cultivation work | Rate Per Hour |
|---|---|
| Tractor drivers | $ .65 |
| All other production and cultivation workers | .55 |

[1] Large barrel varieties: Co. 290; C.P. 29/103; C.P. 29/116; C.P. 32/243; C.P. 36/13; C.P. 36/105; C.P. 29/120; C.P. 43/47; C.P. 44/101; C.P. 44/155; N.Co 310; C.P. 47/193; C.P. 48/103; and C.P. 52/68.

[2] Small barrel varieties: All other.

(ii) *Workers between 14 and 1 years of age when employed on time basis.* For workers between 1 and 16 years of age, the wage rat per hour (maximum employment i 8 hours per day for such worker without deduction from Sugar Ac payments to the producer) shall b not less than three-fourths of the ap plicable hourly wage rates for adult provided under subdivision (i) o this subparagraph.

(iii) *Other piecework rates.* Fo any piecework performed on a uni basis for which a rate is not speci fied in subdivision (i) of this sub paragraph, the rate shall be as agree upon between the producer and work er: *Provided,* That the hourly rat of earnings of each worker employe on piecework during each pay perio (such pay period not to be in exces of two weeks), shall average for th time worked at piecework rate du ing such pay period not less than th applicable hourly rate prescribed i subdivisions (i) and (ii) of this sub paragraph.

(2) *Compensable working tim* For work performed under subpara graph (1) of this paragraph, com pensable working time includes a time which the worker spends in th performance of his duties excep time taken out for meals during th work day. Compensable workin time commences at the time th worker is required to start work an ends upon completion of work in th field. However, if the producer re quires the operator of mechanica equipment, driver of animals, or an other class of worker to report to place other than the field, such as a assembly point or a tractor shed, lo cated on the farm, the time spent i transit from such place to the fiel and from the field to such place

ompensable working time. Any time pent in performing work directly re- ted to the principal work per- ormed by the worker, such as serv- ing equipment, is compensable orking time. Time of the worker hile being transported from a cen- al recruiting point or labor camp an assembly point located on the arm, or from a central recruiting oint to the field, is not compensable orking time.

(3) *Equipment necessary to per- orm work assignment.* The pro- ucer shall furnish without cost to he worker any equipment required the performance of any work as- gnment. However, the worker may e charged for the cost of such equip- ent in the event of its loss or de- truction through negligence of the orker. Equipment includes, but is ot limited to hand and mechanical ools and special wearing apparel, uch as boots and raincoats, required discharge the work assignment.

(b) *Applicability.* The require- ents of this section are applicable all persons employed on the farm, xcept as provided in paragraph (c) elow, in the production, cultivation, harvesting of sugarcane grown the farm for the extraction of ugar or liquid sugar: *Provided,* hat such requirements shall not ap- ly to any person engaged in such ork with respect to sugarcane rown on acreage in excess of the roportionate share for the farm, hich is marketed (or processed) or the production of sugar or liquid ugar for livestock feed or for the roduction of livestock feed, if the roducer furnishes to the appropri- te Agricultural Stabilization and onservation County Committee ac- eptable and adequate proof which atisfies the Committee that the work erformed was related solely to such ugarcane.

(c) *Workers not covered.* The re- uirements of this section are not ap- licable to workers performing serv- es which are indirectly connected ith the production, cultivation, or harvesting of sugarcane, including but not limited to mechanics, welders, and other maintenance workers and repairmen.

(d) *Proof of compliance.* The producer shall furnish, upon request, to the appropriate Agricultural Stabilization and Conservation County Commitee acceptable and adequate proof which satisfies the Committee that all workers have been paid in accordance with the requirements of this section.

(e) *Subterfuge.* The producer shall not reduce the wage rates to workers below those determined in accordance with the requirements in this section through any subterfuge or device whatsoever.

(f) *Claim for unpaid wages.* Any person who believes he has not been paid in accordance with this section may file a wage claim with the local County Agricultural Stabilization and Conservation Office against the producer on whose farm the work was performed. Detailed instructions and wages claim forms are available at that office. Such claim must be filed within two years from the date the work with respect to which the claim is made was performed. Upon receipt of a wage claim the County office shall thereupon notify the producer against whom the claim is made concerning the representation made by the worker. The County ASC office shall conduct such investigation as it deems necessary. The producer and worker shall be notified in writing of the recommendation of the County ASC Committee for settlement of the claim. If either party is not satisfied with the recommended settlement, an appeal may be made to the State Agricultural Stabilization and Conservation Office, 1517 Sixth Street, Alexandria, Louisiana, which shall likewise consider the facts. The producer and worker shall be notified in writing of the recommendation of the State ASC Committee for settlement of the claim. If the recommendation of the State ASC Committee is not accept-

able, either party may file an appeal with the Director of the Sugar Division, Commodity Stabilization Service, U. S. Department of Agriculture, Washington 25, D. C. All such appeals shall be filed within 15 days after receipt of the recommended settlement from the respective committee, otherwise such recommended settlement will be applied in making payment under the act. If a claim is appealed to the Director of the Sugar Division, his decision shall be binding on all parties insofar as payments under the act are concerned.

(g) *Effective period.* The provisions of this section applicable to harvest work shall become effective on the date of publication of this section in the Federal Register and the provision for production and cultivation work shall become effective on January 1, 1960, and the provisions of this section shall remain in effect until amended, superseded, or terminated.

### Statement of Bases and Considerations

(a) *General.* The foregoing determination establishes fair and reasonable wage rates to be paid for work performed by persons employed on the farm in the production, cultivation, or harvesting of sugarcane in Louisiana as one of the conditions with which producers must comply to be eligible for payments under the act.

(b) *Requirements of the act and standards employed.* Section 301 (c) (1) of the act requires that all persons employed on the farm in the production, cultivation, or harvesting of sugarcane with respect to which an application for payment is made shall have been paid in full for all such work, and shall have been paid wages therefor at rates not less than those that may be determined by the Secretary to be fair and reasonable after investigation and due notice and opportunity for public hearings; and in making such determinations the Secretary shall take into consideration the standards therefor formerly established by him under the Agricultural Adjustment Act, as amended (i.e., cost of living, prices of sugar and by-products, income from sugarcane, and cost of production), and the difference in conditions among various producing areas.

(c) *Wage Determination.* The requirements of this determination are the same as those of the prior determination, except that (1) time rates for all classes of work or operation are increased 5 cents per hour; (2) the determination will remain in effect until amended, superseded, or terminated; (3) two classes of work having the same rate have been combined; and (4) an additional variety of sugarcane has been added to the large barrel category for piecework rate purposes.

A public hearing was held in Thibodaux, Louisiana, on July 30, 1959 at which interested persons were afforded the opportunity to testify with respect to fair and reasonable wage rates for work performed during the 1959 harvest season and for production and cultivation work during the calendar year 1960. Testimony was presented by an economist of the Louisiana State University appearing at the request of the American Sugarcane League; by the Chairman of the Labor Committee of the American Sugarcane League; and by the Chairman of the Louisiana Farm Bureau Federation Sugar Advisory Committee. No testimony was presented on behalf of sugarcane field workers.

The economist from the Louisiana State University presented the most recent costs and returns data available from studies of Louisiana sugarcane farms which have been conducted annually since 1937. He stated that for large-scale farms labor costs accounted for approximately 48 percent of total direct costs for the period 1955-57 and that net operating income during that period averaged 88 cents per ton of sugarcane. Labor costs on family-type farms were about 39 percent of total direct

osts. However, this percentage does ot include labor used in custom haresting on these farms. Net operatng income for the family-type farms mounted to 52 cents per ton of ugarcane, exclusive of the value of arm privileges, for the period 955-57.

The Chairman of the Labor Comittee of the American Sugar Cane eague recommended an increase of cents per hour in minimum time ates for each classification of workrs; the continuation of piecework ates at the levels established for haresting 1958 crop sugarcane; the inusion of a new variety of cane in ne "large barrel" category for piecework rate purposes; and, the comination of two classes of work for hich the rate is the same. He stated nat the Committee was of the opinn that with the right recognized f all interested parties to request a eopening of the question of wages nrough the customary investigations nd public hearings, a "continuing" etermination for Louisiana is derable.

The representative of the Sugar dvisory Committee of the Louisiana arm Bureau Federation recomended that there be no increase in age rates. The witness stated that n the basis of cost studies by the ouisiana State University there was o indication of producers' ability to rant further wage increases; that ny increase in wage rates at this me would hasten the further conolidation of farms and bring about nore rapid corporate farm opertions, resulting in greater mechaniation and displacement of labor; and nat the Commitee would not object o a continuing determination.

Consideration has been given to ne recommendations presented at ne hearing, to the returns, costs, and rofits of sugarcane producers obained by survey for recent prior ears and recast in terms of prospecve price and production conditions or the current year, and to other ertinent factors.

The minimum wage rates established in this determination are the same as those recommended by the Labor Committee of the American Sugar Cane League. Analysis of pertinent data indicates that as a result of the larger volume of operations stemming from the removal of acreage restrictions and continuing gains in labor productivity on the farms, the increase in time wage rates provided in the determination is within producers' ability to pay. During recent years many producers have paid wage rates in excess of the minimums established by the wage determinations. The prevailing wage rates paid production, cultivation, and harvesting workers in 1958 averaged about 8 percent above the determination rates.

The worker classification of teamsters has been combined with loaders, spotters, ropemen, and grabmen. Inasmuch as the work of teamsters constitutes only a minor portion of the average man-hour inputs for harvesting sugarcane and since the wage rate for all of the workers affected is the same, the consolidation will effect a further simplication of the wage schedule.

Although this determination is on a continuing basis the Department, in order to keep informed of current conditions in the area, will conduct the customary investigations, and analyze pertinent data and will afford interested persons the opportunity to present testimony at a hearing to be held annually.

After consideration of all the factors this determination is deemed to be fair and reasonable.

Accordingly, I hereby find and conclude that the foregoing wage determination will effectuate the wage provisions of the Sugar Act of 1948, as amended. (Sec. 403, 61 Stat. 932; 7 U.S.C. 1153. Interprets or applies Sec. 301, Stat. 929, as amended; 7 U.S.C. 1131).

Issued this 13th day of Oct., 1959.

/s/ True D. Morse
Acting Secretary of
Agriculture

# SUGAR MARKET STATISTICS THROUGH OCT. 9, 1959

| | Today | 1 Month Ago | 1 Year Ago |
|---|---|---|---|
| QUOTA RAWS DELIVERED NEW YORK | 6.55 | 6.50 | 6.45 |
| QUOTA RAWS DELIVERED NEW ORLEANS | 6.51 | 6.46 | 6.41 |
| RESIDUAL SPOT RAWS (In Cuba) | 3.14 | 3.15 | 3.42 |

**SUGAR FUTURES No. 6**
**(Closing Bid Prices)**

| | Nov. | Mch. | May |
|---|---|---|---|
| Today | 6.07 | 5.55 | 5.62 |
| 1 Month Ago | 5.99 | 5.60 | 5.71 |
| 1 Year Ago | 5.93 | 5.66 | 5.70 |

**OFFSHORE RECEIPTS AT NEW ORLEANS**
**(Long Tons, 2,240 lbs.)**

| | Jan. 1 Oct. 10 1959 | Jan. 1 Oct. 10 1958 |
|---|---|---|
| American | 389,560 | 379,985 |
| National (Godchaux) | 168,240 | 168,059 |
| Colonial | 143,440 | 141,729 |
| Henderson | 101,826 | 94,969 |
| Southdown | 64,786 | 42,964 |
| South Coast | 70,730 | 64,085 |
| Supreme | 126,788 | 118,556 |
| Totals | 1,065,370 | 1,010,347 |

## IN THE FIELD

(Continued from page 20)

bundles of this cane. Extra time and care must be taken to prevent mixtures and spread of disease. One cane in the wrong bundle creates a big problem and a mixture is started. Mixtures are forever a problem. When two varieties are transferred at the same time one variety is wrapped in tarpaulin to prevent mixtures.

Growers should be constantly aware of the great role research plays in their industry. New and better varieties are the lifeblood of this industry, and growers should be appreciative of the good job the scientists of L. S. U. and the U. S. D. A. are doing in the cane breeding program.

———o———

## UP FRONT

(Continued from page 19)

ered a layman's definition. Basically, there must be an object to be repaired or restored, and the repair service should be the restoration of such object to its former or to a more usable condition. The word "repair" is defined in Webster's Dictionary, "To resort to a sound or good state after decay, injury, dilapidation or partial destruction."

7. Q. Is the following certification given by an owner of immovables, either by nature or by destination, to the repair shop furnishing repairs sufficient:
"The undersigned hereby certifies that the repairs covered by the above invoice were performed or equipment or machinery owned by the undersigned which equipment or machinery was placed on land owned by the undersigned for its service and improvement, and will continue to be so used.

Owner's signature

Owner's address

Date"?

A. The above certification is sufficient.

8. Q. Is the repair shop which furnishes repairs protected from liability to the State by obtaining a proper certificate from the owner?

A. Yes. If a proper certificate is furnished by the owner, the repair shop is protected. Responsibility for an erroneous certification is on the owner of the property repaired.

NOTE:

Each of the above questions assumes the machinery or equipment is owned by the land owner and has been placed on the land for its service and improvement.

### Determinations

What has happened to the Fair Price and Wage determinations? Many, many people have asked that question, and it is a good one.

Here it is practically the middle of October; the harvesting season is well underway, laborers are working in the fields and cane is being delivered to mills all over the sugar district, but the Fair Price and Wage determinations, that the Industry needs in its business, are lost somewhere in Washington. It is all very exasperating.

### Quotation Committees

Mr. F. A. Graugnard, Jr., President of the Louisiana Sugar Exchange, has chosen the personnel of the raw sugar and blackstrap molasses quotations committees of the Exchange for the 1959-1960 pricing periods. While no word has been received from Washington, we have every reason to believe that the pricing period for raw sugar will begin on October 9th and end on January

KEEP MORE PROFIT

BIG N

FOR YOURSELF!

Big N ammonia is 82% nitrogen and 100% available. Goes to work immediately. Heavier, more profitable crops.

•

New Iberia phone EM 4-4191
Available at our plants:

PATOUTVILLE
NEW IBERIA-LOREAUVILLE

MID-SOUTH CHEMICAL CORPORATION

1222 Riverside • Memphis, Tenn. • WHitehall 6-1632

FARMER CITY, ILL. • HARLINGEN, TEXAS • LAKE CHARLES, LA. • MT. VERNON, IND. • NEW IBERIA, LA

28, 1960. This is the period recommended without opposition at the Fair Price hearing held in Thibodaux July 30th. We also believe that the pricing period for blackstrap molasses will start on October 9th and end April 28th. This is sixteen weeks for sugar and twenty-nine weeks for blackstrap.

### Sugar Committee

The raw sugar quotation Committee of the Exchange this season is composed of Sedgwick Howard, R. M. Cockburn, James Graugnard, Louis P. LeBourgeois, John B. Levert, Chas. A. Levy, and Earl B. Wilson. Alternates on the Committee are James Butler, J. C. LeBourgeois, Jr., Henry Powell, Lloyd Emmer, and T. H. Allen.

The Committee met on October 9th and elected Mr. Howard, Chairman, and James Graugnard, Vice-Chairman.

### Blackstrap Committee

The blackstrap molasses quotation committee membership consists of T. H. Allen, Bascom Doyle, C. F. Gibbens, John Manard, S. J. Menard, and H. C. Vaccaro. Serving as alternates on this committee will be F. Evans Farwell for Mr. Allen, J. A. Commins for Mr. Doyle, James Butler for Mr. Gibbens, Joe Cunningham for Mr. Manard, Richard Repak for Mr. Menard, and W. H. Chadwick for Mr. Vaccaro. Mr. Vaccaro has been elected Chairman of the Committee with Mr. Chadwick to serve in his absence.

*"Sugar Factory Insurance Specialists"*

**GILLIS, HULSE and COLCOCK, Inc.**

839 Union St. New Orleans, La.

Telephone JA 2-1225

**Commercial Members of the AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC.**

AMERICAN CYNAMID CO.
30 Rockefeller Plaza
New York, N. Y.

AMERICAN MOLASSES CO., OF LOUISIANA, INC.
400 N. Gayoso St.
New Orleans, La.

HARRY L. LAWS & CO., INC.
126 Carondelet Street
New Orleans 12, La.

THE HIBERNIA NATIONAL BANK
New Orleans, La.

LAMBORN & COMPANY, INC.
Carondelet Building
New Orleans, La.

LEBOURGEOIS BROKERAGE CO.
823 Perdido Street
New Orleans, La.

THE NATIONAL BANK OF COMMERCE
New Orleans, La.

PENICK & FORD LTD., INC.
National Bank of Commerce Bldg.
New Orleans, La.

ESSO STANDARD OIL COMPANY
(Louisiana Division)
P. O. Box 1250 New Orleans 10, La.

STANDARD SUPPLY & HARDWARE CO., INC.
822 Tchoupitoulas St.
New Orleans, La.

STATE AGRICULTURAL CREDIT CORP., INC.
837 Whitney Building
New Orleans, La.

WHITNEY NATIONAL BANK
New Orleans, La.

33.61
Sa35
Library, Experiment Station,
University, Station
Baton Rouge, La. (3)
LOUISIANA STATE UNIVERSITY
CHEMISTRY
LIBRARY

# THE SUGAR BULLETIN

38—No. 3 NOVEMBER 1, 1959

*Official Bulletin of the American Sugar Cane League of the U. S. A.*

PRINTED ON PAPER MADE FROM
LOUISIANA SUGAR CANE BAGASSE

## *In This Issue*

Up Front With The League ..... 31
**Determinations—Benefits—C. S. Churchill**

In The Field With Lloyd L. Lauden ..... 32
**Experimental Harvesters**

In Washington With Joe Ferris ..... 33

1959-60 Fair Price Determination ..... 34

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry

THE SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Editor

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

**Issued on the 1st and 15th of each month. Subscription: Member 50 cents a year. Non-Members $3.00 a year.**

**Washington Office, 510 Union Trust Bldg., Washington, D. C.**
**Josiah Ferris, Manager**

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
W. F. Giles, Jeanerette, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

# UP FRONT WITH THE LEAGUE

*by A. W. Dykers*

### Determinations

Well, we finally got'em. We refer, of course, to the Wage and Fair Price determinations which, for a while, appeared to have been lost in the controlled confusion that is Washington. We stopped the presses to get the Wage determination into the October 15 issue of The Sugar Bulletin, and in this issue, beginning on page 34, we have the Fair Price Determination. Right here we offer a mild apology to our friends in the Sugar Division. Perhaps we became lost in the uncontrolled confusion that is Louisiana but, after all, asking what happened to the determinations wasn't such a bad question even if one of them was just a few pages away! At this time of the year, anything can happen.

### Benefits

By the time we are able to print and mail this issue of *The Sugar Bulletin,* all of our cane growing readers probably will already have realized that reductions in railroad freight rates on sugar have resulted in a revision of the freight rates paragraphs in the Fair Price Determination that will mean almost half a million extra dollars in the pockets of the cane farmers.

In this connection we would like to echo the thought of Gilbert J. Durbin, the League's General Manager, so we repeat the following:

> "Reductions in freight rates on sugar which became effective last year will result in prices for sugar cane this fall higher than such prices would otherwise be. Growers will benefit to the extent of 5.5 to 12.4 cents per ton of cane. Those growers farthest from New Orleans will profit most because they are in areas where freight rate reductions were the largest.
>
> Louisiana cane farmers will receive about $500,000 more for their cane this year because of the sugar freight reductions. Cane Processors also benefit from the rate reductions, but to a lesser extent.
>
> The freight rate reductions on Louisiana sugar were due in large part to the efforts of the American Sugar Cane League. The League's Freight Rate Committee and its traffic experts have worked for many years to obtain more reasonable transportation charges on sugar."

### C. S. Churchill

Funeral services for Charles Stewart Churchill, were held in Donaldsonville and Baton Rouge on Sunday, October 18th. Our friend, and the friend of everyone who knew him, passed away in the Schexnayder Hospital in Donaldsonville on October 17th and the Louisiana sugar industry lost one of its most able leaders.

Mr. Churchill was a member of several committees of the American Sugar Cane League, including the very important Freight Rate Committee, and was also a processor member of the Industry's Grower-Processor Committee. He was a member of the Board of Directors of the Louisiana Sugar Exchange, and at the time of his death, was President and Manager of the big Evan Hall Sugar Co-operative mill which, for a number of years, has handled more cane than any other sugar factory in the State.

# IN THE FIELD WITH LLOYD L. LAUDEN

*by Lloyd L. Lauden*

Growers will be interested to know that several new types of cane harvesters are in the Louisiana cane fields today. Many growers may be interested in knowing where these harvesters are being operated to see field operations.

The experimental U. S. D. A. cane harvester is presently being operated at the Terrebonne Division of The South Coast Corporation at Montegut, La. This machine is designed to cut, clean, and load cane in a wagon pulled behind the harvester. Major emphasis is being placed on a new pick-up attachment to the harvester this year. Those interested in seeing this machine in operation should contact Mr. Russell Ramp of the Houma Sugar Station or Mr. Earl Gravois, Manager of the Terrebonne Division of The South Coast Corporation.

The Cary Combine, a harvester designed by Mr. J. E. Cary and Mr. R. E. Shafer which was operated last year satisfactorily both in Louisiana and in Florida, is operating again this year at the Lula Plantation, Belle Rose, La. This harvester cuts, cleans, and loads cane into a wagon drawn along the side of the harvester. The Cary Combine differs from other harvesters in that the cane stalks are cut in short pieces, either 14 or 21 inches in length. Lula Factory has modified cane wagons to handle the short pieces of cane. The combine is being operated 16 hours per day by plantation labor in two shifts. The first shift runs from 12:00 o'clock noon till 8:00 P.M. and the second shift runs from 8:00 o'clock at night till 4:00 o'clock in the morning. Growers interested in seeing this operation should contact Mr. Charles Savoie or Mr. Paul Cancienne of Lula Factory, or representatives of Cary Iron Works, Inc., of Opelousas.

Last year, J. & L. Engineering Company, Inc., of Jeanerette, La. put several new light-weight one-man-operated harvesters in the cane fields. Quite a few more were put in the fields this year. Growers interested in seeing this machine should contact Mr. Larry Lampo or Mr. Joe Pugh of Jeanerette, La. It is also reported that J. & L. Engineering Co., Inc., is contemplating the designing and construction of a new combine cane harvester under a contractual agreement for Puerto Rico.

Thomson Machinery Company developed and sold a lighter weight cane harvester last year. This is the Junior model of their big Senior Hurrycane Harvester. These machines are operating in a number of places throughout the belt. This year Thomson Machinery Company has developed and is now demonstrating the latest addition to their line, a lighter weight and lower cost version of the Hurrycane Harvester. The machine weighs about 8500 pounds. Growers interested in seeing this small harvester should contact representatives of the company in Thibodaux, La.

Another new cane harvester will be put into the fields this year. This cutter - cleaner - loader combination harvester is being developed by Mr. S. A. Thornton of Jeanerette, La., with The South Coast Corporation and Southdown, Inc., cooperating. This new combination harvester will be field tried at Oaklawn Plantation in Franklin, La. Growers interested in this machine should contact Mr. S. A. Thornton of Jeanerette or Mr. Mike McNulty, Manager of Oaklawn Plantation.

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*

For the past six months numerous Washingtonians have been making book on how long Cuban Dictator, Fidel Castro would last. Very few thought he would last as long as he has—and they are now paying their old bets and are making new ones. They are firmly convinced that the end of the revolutionary regime is inevitable and close.

Renewed political flareups all over the Island certainly indicate the increased unhappiness of the Cuban people over the high-handed violences of the "liberator". Every day newspapers carry stories of attempts on his life and abortive plots to overthrow his control. Cubans do not like Castro's agrarian reform law because it confiscates their property. He has imposed restrictions on imports from food-stuffs, to automobiles and T.V. sets. On October 1st he imposed high taxes on alcoholic beverages, both imported and domestic, including Cuban rum and beer. He has destroyed Cuba's lucrative tourist business, 95% of which was derived from visitors from the United States. Although he publicly invites tourists from the United States, he secretly instructs his henchmen to inconvenience and annoy them as much as possible.

When he inaugurated his agrarian reform program he announced that owners of sugar properties on the Island would be granted one year's grace before their properties would be expropriated. However, he has quietly moved in and "intervened" in the management of a number of valuable sugar operations, although the grace period still has some months to run.

Fidel's sales of Cuban sugar in the world market, at prices considerably under the cost of production, to operators who resold the sugar for a nice profit, has not made his bankers happy.

Speaking of unhappiness, let's not overlook the sentiment he has created in the bosoms of various members of our own State Department. When Castro's name is mentioned in their presence, some of them have been heard to softly sing the old, well-known undertaker's theme song—"I'll Be Glad When You're Dead You Rascal You!

Fidel Castro may not be a complete success as an economist or financier, but one thing is certain, he has demonstrated unusual ability to whip up anti-United States sentiment on the spur of almost every moment since he rose to power. His latest achievement in that line to date (October 23rd) was the march on the U. S. Embassy. Some two or three hundred Fidelistas ordered by their leader for a show of loyalty, marched on our Embassy in Havana with shouts and banners, deriding the United States. Our Ambassador to Cuba was forced to keep the doors of the Embassy locked with members of his staff inside.

Castro is apparently not content with spreading unhappiness in the U. S. State Department because he also accuses Senator James Eastland, Democrat of Mississippi, Head of the Senate Internal Security Sub-Comfittee for responsibility in the recent bombings of Havana and the distribution by plane of leaflets opposing him and his government.

The last straw however, is when the black bearded "Prime Minister" turns against various members of his most active supporters and accuses them of being traitors. This he is doing almost daily.

If the undertaker's theme song has not yet been translated into Spanish, it soon will be, and we predict that it will become a "Number One Tune".

# 1959-60 FAIR PRICE DETERMINATION

Pursuant to the provisions of section 301(c)(2) of the Sugar Act of 1948, as amended (herein referred to as "act"), after investigation, and due consideration of the evidence presented at the public hearing held in Thibodeaux, Louisiana, on July 30, 1959, the following determination is hereby issued:

§ 874.12 *Fair and reasonable prices for the 1959 crop of Louisiana sugarcane.* A producer of sugarcane in Louisiana who is also a processor of sugarcane (herein referred to as "processer") shall have paid or contracted to pay, for sugarcane of the 1959 crop grown by other producers and processed by him, in accordance with the following requirements.

(a) *Definitions.* For the purpose of this determination the term:

(1) "Price of raw sugar" means the price of 96° raw sugar quoted by the Louisiana Sugar Exchange, Inc.; except that if the Director of the Sugar Division determines that such price does not reflect the true market value of raw sugar, because of inadequate volume, failure to report sales in accordance with the rules of such Exchange or other factors, he may designate the price to be effective under this determination, which he determines will reflect the true market value of raw sugar.

(2) "Price of blackstrap molasses" means the price per gallon of blackstrap molasses quoted by the Louisiana Sugar Exchange, Inc.; except that if the Director of the Sugar Division determines that such price does not reflect the true market value of blackstrap molasses, because of inadequate volume, failure to report sales in accordance with the rules of such Exchange or other factors, he may designate the price to be effective under this determination, which he determines will reflect the true market value of blackstrap molasses.

(3) "Weekly average price" means the simple average of th daily prices of raw sugar or black strap molasses, for the week (Fri day through the following Thurs day) in which the sugarcane is de livered.

(4) "Season's average price means the simple average of th weekly prices of raw sugar fo the period October 9, 1959 throug January 28, 1960, and of black strap molasses for the period Octo ber 9, 1959 through April 28, 1960

(5) "Net sugarcane" means th quantity of sugarcane obtained b deducting the weight of trash fron the gross weight of sugarcane a delivered by a producer..

(6) "Trash" means green o dried leaves, sugarcane tops, dirt and all other extraneous materia delivered with sugarcane.

(7) "Standard sugarcane mean net sugarcane, containing 12 pe cent sucrose in the normal juic with a purity of at least 76.00 bu not more than 76.49 percent.

(8) "Salvage sugarcane" mean any sugarcane containing either less than 9.5 percent sucrose in the normal juice or less than 68 purity in the normal juice.

(9) "State Office" means the Louisiana State Agricultural Stabilization and Conservation Office Alexandria, Louisiana.

(10) "State Committee" means the Louisiana State Agricultural Stabilization and Conservation Committee.

(b) *Basic price:*

(1) The basic price for standard sugarcane shall be not less than $1.06 per ton for each one-cent per pound of raw sugar determined on the basis of the weekly average price or the season's average price in accordance with whichever period was used by the processor during the 1958 crop, or the processor may use the alternate period upon written approval by the State Office: *Provided*, that the average price of raw sugar as determined

above shall be increased 0.03 cent for all mills located in Freight Area (a); shall be unchanged for all mills in Freight Area (b); and may be decreased 0.03 cent in Freight Area (c).[1]

[1] Freight Area (a) includes all mills except those located in Areas (b) and (c) below:

Freight Area (b) includes all mills located north of Bayou Goula between the Atchafalaya and Mississippi Rivers and southeast of New Iberia west of the Atchafalaya River.

Freight Area (c) includes all mills located north and west of New Iberia west of the Atchafalaya River.

(2) The basic price for salvage sugarcane shall be determined in accordance with the method of settlement used by the processor for the 1958 crop, except that the processor and producer may agree upon a different method of settlement subject to written approval by the State Office upon a determination by the State Committee that the method of settlement and the resultant price are fair and reasonable.

(c) *Conversion of net sugarcane to standard sugarcane.* Net sugarcane (except salvage sugarcane) shall be converted to standard sugarcane as follows:

(1) By multiplying the quantity of net sugarcane by the applicable quality factor in accordance with the following table:

| Percent sucrose in normal juice | Standard sugarcane quality factor [1] |
|---|---|
| 9.5 | 0.60 |
| 10.0 | .70 |
| 10.5 | .80 |
| 11.0 | .90 |
| 11.5 | .95 |
| 12.0 | 1.00 |
| 12.5 | 1.05 |
| 13.0 | 1.10 |
| 13.5 | 1.15 |
| 14.0 | 1.20 |
| 14.5 | 1.25 |

[1] The quality factor for sugarcane of intermediate percentages of sucrose in normal juice shall be interpolated and for sugarcane having more than 14.5 percent sucrose in the normal juice shall be computed in proportion to the immediately preceding interval.

and,

(2) By multiplying the quantity determined pursuant to subparagraph (1) of this paragraph by the applicable purity factor in the following accompanying table:

(d) *Payment for frozen sugarcane.*

(1) The payment for sugarcane determined pursuant to paragraph (c) herein may be reduced upon certification by the State Office that sugarcane has been damaged by freeze and that the processing of such sugarcane has adversely affected boiling house operations. Deductions from the payment for such frozen sugarcane shall be at rates not in excess of 1.5 percent of the payment for each 0.1 cc. of acidity above 2.50 cc. of N/10 alkali per 10 cc. of juice but not in excess of 4.75 cc. (intervening fractions are to be computed to the nearest multiple of 0.05 cc.). No payment is required for the amount of sugar recoverable from sugarcane testing in excess of 4.75 cc. of acidity.

(2) In the event a general freeze causes abnormally low recoveries of raw sugar by a processor in relation to the sucrose and purity tests of sugarcane, payment for such sugarcane may be as mutually agreed upon between the producer and the processor, subject to written approval by the State Office: *Provided,* That the payment for each ton of net sugarcane shall be not less than an amount equal to the total returns from raw sugar and molasses actually recovered from such sugarcane, determined on the basis of the season's average prices of raw sugar and blackstrap molasses less an amount not to exceed $3.00 per gross ton of sugarcane for processing and less the actual costs of hoisting, weighing, and transporting such sugarcane.

(e) *Molasses payment.* The processor shall pay an amount equal to the product of 6.7 gallons times one-half of the average price per gallon of blackstrap molasses in excess of

STANDARD SUGARCANE PURITY FACTOR [1]

| Purity of normal juice | | Percent sucrose in normal juice | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | At least 9.50 | 9.70 | 9.90 | 10.10 | 10.30 | 10.50 | 11.00 | 11.50 | 12.00 | 12.50 | 13.00 | 13.50 | 14.00 | 14.50 | 15.00 | 15 |
| At least— | But not more than— | But not more than 9.69 | 9.89 | 10.09 | 10.29 | 10.49 | 10.99 | 11.49 | 11.99 | 12.49 | 12.99 | 13.49 | 13.99 | 14.49 | 14.99 | 15.49 | 15 |
| 68.00 | 68.24 | 1.000 | 0.989 | 0.978 | 0.967 | 0.956 | 0.945 | 0.936 | 0.929 | 0.922 | 0.915 | 0.908 | 0.901 | 0.894 | 0.887 | 0.880 | 0. |
| 68.25 | 68.49 | 1.005 | .993 | .982 | .971 | .960 | .949 | .941 | .934 | .927 | .920 | .913 | .906 | .899 | .892 | .885 | . |
| 68.50 | 68.74 | 1.010 | .998 | .987 | .976 | .965 | .954 | .945 | .938 | .931 | .924 | .917 | .910 | .904 | .897 | .890 | . |
| 68.75 | 68.99 | 1.016 | 1.003 | .992 | .981 | .970 | .959 | .950 | .943 | .936 | .929 | .922 | .915 | .909 | .902 | .896 | . |
| 69.00 | 69.49 | 1.021 | 1.009 | .997 | .986 | .975 | .964 | .955 | .948 | .941 | .934 | .927 | .920 | .914 | .908 | .902 | . |
| 69.50 | 69.99 | 1.025 | 1.013 | 1.001 | .990 | .979 | .968 | .960 | .953 | .945 | .938 | .931 | .924 | .918 | .912 | .906 | . |
| 70.00 | 70.49 | 1.030 | 1.018 | 1.006 | .995 | .984 | .973 | .965 | .958 | .950 | .943 | .936 | .929 | .923 | .917 | .911 | . |
| 70.50 | 70.99 | 1.035 | 1.023 | 1.011 | .999 | .988 | .977 | .969 | .962 | .954 | .947 | .940 | .933 | .927 | .921 | .915 | . |
| 71.00 | 71.49 | 1.040 | 1.028 | 1.016 | 1.004 | .993 | .982 | .974 | .966 | .959 | .951 | .945 | .938 | .932 | .926 | .920 | . |
| 71.50 | 71.99 | 1.045 | 1.033 | 1.021 | 1.009 | .998 | .987 | .978 | .970 | .963 | .955 | .949 | .942 | .936 | .930 | .924 | . |
| 72.00 | 72.49 | 1.050 | 1.038 | 1.026 | 1.014 | 1.003 | .992 | .983 | .975 | .967 | .960 | .954 | .947 | .940 | .934 | .928 | . |
| 72.50 | 72.99 | 1.055 | 1.043 | 1.031 | 1.019 | 1.007 | .996 | .987 | .979 | .971 | .964 | .958 | .951 | .944 | .938 | .932 | . |
| 73.00 | 73.49 | 1.060 | 1.048 | 1.036 | 1.024 | 1.012 | 1.000 | .991 | .984 | .976 | .968 | .962 | .955 | .948 | .942 | .936 | . |
| 73.50 | 73.99 | 1.065 | 1.052 | 1.040 | 1.028 | 1.016 | 1.004 | .995 | .988 | .980 | .972 | .966 | .959 | .952 | .946 | .940 | . |
| 74.00 | 74.49 | ---------- | 1.057 | 1.044 | 1.032 | 1.020 | 1.008 | 1.000 | .992 | .984 | .977 | .970 | .963 | .956 | .950 | .944 | . |
| 74.50 | 74.99 | ---------- | 1.062 | 1.049 | 1.036 | 1.024 | 1.012 | 1.004 | .996 | .988 | .981 | .974 | .967 | .960 | .954 | .948 | . |
| 75.00 | 75.49 | ---------- | ----- | 1.054 | 1.041 | 1.028 | 1.016 | 1.008 | 1.000 | .992 | .985 | .978 | .971 | .964 | .958 | .952 | . |
| 75.50 | 75.99 | ---------- | ----- | 1.059 | 1.046 | 1.033 | 1.020 | 1.011 | 1.004 | .996 | .988 | .981 | .974 | .967 | .961 | .955 | . |
| 76.00 | 76.49 | ---------- | ----- | ----- | 1.051 | 1.038 | 1.025 | 1.015 | 1.008 | 1.000 | .992 | .985 | .978 | .971 | .965 | .959 | . |
| 76.50 | 76.99 | ---------- | ----- | ----- | 1.054 | 1.041 | 1.028 | 1.019 | 1.011 | 1.004 | .996 | .989 | .981 | .975 | .969 | .963 | . |
| 77.00 | 77.49 | ---------- | ----- | ----- | ----- | 1.045 | 1.032 | 1.023 | 1.015 | 1.008 | 1.000 | .993 | .985 | .979 | .973 | .967 | . |
| 77.50 | 77.99 | ---------- | ----- | ----- | ----- | 1.049 | 1.035 | 1.027 | 1.019 | 1.011 | 1.003 | .996 | .989 | .982 | .976 | .970 | . |
| 78.00 | 78.49 | ---------- | ----- | ----- | ----- | ----- | 1.039 | 1.031 | 1.023 | 1.015 | 1.007 | 1.000 | .993 | .986 | .980 | .974 | . |
| 78.50 | 78.99 | ---------- | ----- | ----- | ----- | ----- | 1.042 | 1.035 | 1.026 | 1.018 | 1.010 | 1.003 | .996 | .989 | .983 | .977 | . |
| 79.00 | 79.49 | ---------- | ----- | ----- | ----- | ----- | ----- | 1.039 | 1.030 | 1.022 | 1.014 | 1.007 | 1.000 | .993 | .987 | .981 | . |
| 79.50 | 79.99 | ---------- | ----- | ----- | ----- | ----- | ----- | 1.043 | 1.033 | 1.025 | 1.017 | 1.010 | 1.003 | .996 | .990 | .984 | . |
| 80.00 | 80.49 | ---------- | ----- | ----- | ----- | ----- | ----- | ----- | 1.037 | 1.029 | 1.021 | 1.014 | 1.007 | 1.000 | .994 | .988 | . |
| 80.50 | 80.99 | ---------- | ----- | ----- | ----- | ----- | ----- | ----- | 1.040 | 1.032 | 1.024 | 1.017 | 1.010 | 1.003 | .997 | .991 | . |
| 81.00 | 81.49 | ---------- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 1.036 | 1.028 | 1.021 | 1.014 | 1.006 | 1.000 | .994 | . |
| 81.50 | 81.99 | ---------- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 1.039 | 1.032 | 1.024 | 1.017 | 1.009 | 1.003 | .997 | . |
| 82.00 | 82.49 | ---------- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 1.035 | 1.027 | 1.020 | 1.013 | 1.007 | 1.000 | . |
| 82.50 | 82.99 | ---------- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 1.038 | 1.030 | 1.023 | 1.016 | 1.010 | 1.004 | . |
| 83.00 | 83.49 | ---------- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 1.033 | 1.027 | 1.019 | 1.013 | 1.007 | 1. |
| 83.50 | 83.99 | ---------- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 1.036 | 1.030 | 1.022 | 1.016 | 1.010 | 1. |
| 84.00 | 84.49 | ---------- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 1.033 | 1.025 | 1.019 | 1.013 | 1. |
| 84.50 | 84.99 | ---------- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 1.028 | 1.022 | 1.016 | 1. |

[1] Factors applicable to higher sucrose and purity of the normal juice than shown in this table shall be determi by the same method of calculation used to compute the factors specified and shall be furnished by the Louisi State ASC Office, Alexandria, Louisiana, upon request.

6 cents for each ton of net sugarcane processed except (1) salvage sugarcane where settlement is based on the so-called "Java Formula", (2) frozen sugarcane testing in excess of 4.75 cc. acidity, and (3) sugarcane damaged by a general freeze which is tolled by the processor and settlement is based on the net proceeds from the sugar and molasses recovered from such cane. The average price of blackstrap molasses shall be the weekly average price or the season's average price in accordance with whichever period was used by the processor during the 1958 crop, or the processor may use the alternate period upon written approval by the State Office.

(f) *Hoisting, weighing, and tra portation.* The price for sugarca established by this determinati shall be applicable to sugarcane d livered by the producer (1) to hoist for loading into the conveyar for transportation to the mill, (2) from the farm directly to t mill. With respect to sugarcane d livered to a hoist, the costs of hoi ing, weighing, and transporting su arcane from the hoist to the m shall be paid by the processor or t processor shall make allowance to t producer for such service, based net sugarcane, at per ton rates n less than those made with respect

garcane of the 1958 crop: *Provid-*
, That the processor shall not be
quired to make hauling allowances
the producer in excess of the rates
arged by a contract or commercial
rrier or the rates which such car-
er would have charged for per-
rming such service. With respect
sugarcane delivered directly from
e farm to the mill the processor
all pay the cost of transportation
shall make an allowance to the
oducer for such service, based on
t sugarcane, at per ton rates not
ss than those made with respect to
e 1958 crop: *Provided,* That the
ocessor shall not be required to
ake an allowance to the producer
r hauling sugarcane directly from
e farm to the mill at rates in ex-
ss of 30 cents per ton for distances
one mile or less, 40 cents per ton
r distances of 1.1 to 2 miles, plus
cents per ton for each mile or frac-
on thereof in excess of 2 miles;
*ovided, further,* That nothing in
is paragraph shall be construed as
ohibiting negotiations between the
ocessor and the producer with re-
ect to the amount of allowances to
made to the producer, any change
be approved in writing by the State
ffice upon a determination by the
ate Committee that the change re-
lts in allowances which are fair
d reasonable.

(g) *Mutual plan for improving rvesting and delivery.* If a proc-
sor and the producers delivering
garcane to such processor mutually
ree upon a plan for improving har-
sting and delivery operations, the
ocessor may deduct from the price
r ton of sugarcane an amount equal
one-half of the per ton cost of such
an. Such deduction may not be
ade until the plan has the written
proval of the State Office and it
s been determined by the State
mmittee that the plan is fair and
asonable.

(h) *Sugarcane for livestock feed.* he requirements of this section are
plicable to all sugarcane grown by
producer and processed by the
processor for the extraction of sugar or liquid sugar: *Provided,* That such requirements shall not apply with respect to sugarcane grown on acreage in excess of the proportionate share for the farm if such sugarcane is marketed (or processed) for the production of sugar or liquid sugar for livestock feed or for the production of livestock feed.

(i) *Subterfuge.* The processor shall not reduce the returns to the producer below those determined in accordance with the requirements of this section through any subterfuge or device whatsoever.

## Statement of Bases and Considerations

(a) *General*

The foregoing determination establishes the fair and reasonable price requirements which must be met, as one of the conditions for payment under the act, by a producer who processes sugarcane of the 1959 crop grown by other producers.

(b) *Requirements of the act*

Section 301(c)(2) of the act provides as a condition for payment, that the producer on the farm who is also, directly or indirectly, a processor of sugarcane, as may be determined by the Secretary, shall have paid, or contracted to pay under either purchase or toll agreements, for sugarcane grown by other producers and processed by him at rates not less than those that may be determined by the Secretary to be fair and reasonable after investigation and due notice and opportunity for public hearing.

(c) *1959 price determination*

This determination continues the provisions of the 1958 determination except that: (1) the period for determining the season's average price for raw sugar has been shortened one month and the period for determining the season's average price for molasses has been lengthened two months; (2) the differentials in freight costs on raw sugar for the three areas have been changed to recognize reductions in freight rates;

(3) molasses payments are to be based on 6.7 gallons per ton of sugarcane to reflect the most recent 5-year average molasses recovery; and (4) the processor is required to pay costs or make allowances for hoisting, weighing, and transporting sugarcane at the hoist where the sugarcane is loaded into the conveyance for shipment to the mill.

A public hearing was held in Thibodaux, Louisiana, on July 30, 1959, at which interested persons were afforded the opportunity to testify with respect to fair and reasonable prices for the 1959 crop of sugarcane. A representative of the Grower-Processor Committee recommended that the pricing period for raw sugar extend from October 9, 1959, through January 28, 1960; that the pricing period for blackstrap molasses extend from October 9, 1959, through April 28, 1960; that the raw sugar freight differentials be reduced to reflect current raw sugar freight rates; that the provisions of the 1958 determination relating to payment for salvage sugarcane and frozen sugarcane be continued for the 1959 crop; that sugarcane purchased by the Valentine Sugar Company in the area formerly served by the Reserve factory be delivered by the producer, at his own expense, to the company's hoist located on the bank of the Mississippi River where it will be loaded into barges and transported to the mill by the processor; and that the other provisions of the 1958 determination remain unchanged. The representative of the Sugar Advisory Committee of the Louisiana Farm Bureau Federation concurred in the recommendations of the Grower-Processor Committee relating to pricing periods for sugar and molasses; changes in the area freight rate differentials; and payment for frozen sugarcane. The witness recommended, however, that "salvage" sugarcane be redefined to include only frozen sugarcane having high acidity and low recoveries of sugar in relation to its sucrose and purity tests: that immature or other sug cane containing either less than percent sucrose or less than 68 pur in the normal juice, except froz sugarcane, be classed as "sub-sta dard" sugarcane; and, that the ba price for such cane be determin by all processors on the basis of scale-down of the sucrose and pur factors provided in the determi tion.

Consideration has been given the testimony presented at the pub hearing, to information obtained a result of investigation; and to oth pertinent factors. Analysis of co parative returns, costs, and prof of producing and processing sug cane obtained through field surv and recast in terms of prospecti price and production conditions f the 1959 crop, indicates that the sha ing relationship between produce and processors provided in the 19 determination is equitable for t 1959 crop.

The recommendations of produc and processor representatives co cerning the periods for computi the season's average prices of r sugar and molasses, changes in a freight rate differentials, continu tion of the pricing basis for froz sugarcane, and the limitation of t processors' responsibility for costs hoisting and transporting sugarca have been adopted.

The witness for the Grower-Pr essor Committee indicated that did not anticipate marketing restr tions on raw sugar during the 19 processing season, and that a short pricing period would more likely c incide with the anticipated mark opportunities for raw sugar. On t other hand, it was pointed out th in view of the large quantities molasses available, buyers have in cated an unwillingness to purcha Louisiana molasses on a short s son's average pricing basis. The w ness for the Grower-Processor Co mittee testified that if a short pr ing period was adopted processo might be inclined to "dump" mol

s on the market whereas the pos-
ɔility of more orderly marketing
ɔuld be enhanced by a longer pric-
g period.

Prior to 1949 freight rate differ-
tials were broadly recognized in
e payment for sugarcane through
e use of different normal juice
crose ranges for "standard" sugar-
ne. In 1949 "standard" sugarcane
as defined as sugarcane containing
: percent sucrose in the normal
ice. Raw sugar freight rate differ-
tials were established for three
ographical areas to compensate for
e former differences in the defini-
ɔn of "standard" sugarcane. These
fferential deductions from the sea-
n's average price per pound of raw
gar during the period 1949-1954
nounted to .00 cent for the "base"
ea (a), .065 cent for area (b), and
0 cent for area (c). Freight rates
ere increased in 1955 and the dif-
rentials were adjusted to .022 cent,
97 cent, and .147 cent for the three
eight areas for the 1955-1958 crops.
ırrent freight rates are substanti-
ly less than those established in
55. As a result of the lower rates
d use of the same method of com-
ting differentials applicable in pri-
years, this determination estab-
hes differentials of plus .03 cent
the "base" area (a), .00 cent in
ea (b), and minus .03 cent in area
). Accordingly, for the purposes
computing payments for sugar-
ne the season's average price of
w sugar will be increased .03 cent
area (a), unchanged in area (b)
d decreased .03 cent in area (c).

Valentine Sugar Company pro-
ses to purchase 1959 crop sugar-
ne from several producers located
an area formerly serviced by a
ocessor who has discontinued sug-
cane grinding operations. The pro-
cers in this area are unable to have
eir cane ground at other nearby
ills because such mills do not have
fficient cane grinding capacity.
alentine Sugar Company, a proces-
r of sugarcane, is located more
than 85 miles from the area of production. The processor has installed a hoist on the bank of the Mississippi River and has agreed with the producers involved that cane will be delivered in the producing locality to this hoist at the producer's expense, where it will be hoisted and transported to the mill at the processor's expense. About 80 percent of the cane delivered by producers will be delivered to the river hoist from the fields in tractor carts but 20 percent of the cane will be hoisted at farm hoists into trucks for delivery to the river hoist. The processor's cost of hoisting and transporting the cane by barge to the mill is estimated to be $1.25 per ton. In view of the unusual circumstances of intermediate hoisting and transportation of sugarcane and the agreement between the parties as to the sharing of costs, this determination requires the processor to pay the cost or make allowances to producers for hoisting, weighing and transporting cane only from the hoist at the river bank to the mill. Although this provision is general, it is expected to apply only to Valentine Sugar Company and the group of producers in the former Reserve area.

The recommendation of the Farm Bureau for a change in the definition and method of payment for "salvage" sugarcane has been studied with interest. The effect of the recommendation would be to classify such sugarcane with all other sugarcane, except frozen sugarcane, purchased by the processor. A comparison of the two methods of payment used for valuing salvage cane indicates the possibility of differences in payment because of the lack of consistency in the relationship of the sucrose and purity levels of such sugarcane. Data available to the Department are neither extensive nor uniform. Accordingly, the recommendation has not been adapted in this determination.

On the basis of examination of all

pertinent factors, the provisions of this determination are deemed to be fair and reasonable.

Accordingly, I hereby find and conclude that the foregoing price determination will effectuate the price provisions of the Sugar Act of 1948, as amended. (Sec. 403, 61 Stat. 932; 7 U.S.C. 1153. Interprets or applies sec. 301, 61 Stat. 929; as amended; 7 U.S.C. 1131).

Issued this 14th day of Oct. 1959.

/s/ True D. Morse
Acting Secretary of Agriculture

---

**STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACTS OF CONGRESS OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, AND JULY 2, 1946**

**(Title 39, United States Code, Section 233)**

Of The Sugar Bulletin, published semi-monthly at New Orleans, La., for October 1, 1959, State of Louisiana, Parish of Orleans.

Before me, a Notary Public in and for the State and parish aforesaid, personally appeared Gilbert J. Durbin, who, having been duly sworn the Editor of the Sugar Bulletin and that the following is, to the best of his knowledge and belief, a true statement of the ownership. management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Acts of March 3, 1933, and July 2, 1946, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to wit.

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, The American Sugar Cane League of the U. S. A., Inc., New Orleans, La.; Editor, Gilbert J. Durbin, New Orleans, La.; Managing Editor, Andrew W. Dykers; Business Manager, none.

2. That the owner is the American Sugar Cane League of the U. S. A., Inc., New Orleans, La.; Warren Harang, Jr., Thibodaux, La., President; Ed. Schexnayder, White Castle, La., Vice President; J. J. Shaffer, Houma, La., Secretary; F. Evans Farwell, New Orleans, La., Treasurer.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are none.

GILBERT J. DURBIN,
Editor.

Sworn to and subscribed before me this 25th day of September, 1959.

BRITTMAR P. LANDRY,
Notary Public.

(Seal)

(My commission expires at death.)


**Commercial Members of the AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC**

**AMERICAN CYNAMID CO.**
**30 Rockefeller Plaza**
**New York, N. Y.**

**AMERICAN MOLASSES CO., OF LOUISIANA, INC.**
**400 N. Gayoso St.**
**New Orleans, La.**

**HARRY L. LAWS & CO., INC.**
**126 Carondelet Street**
**New Orleans 12, La.**

**THE HIBERNIA NATIONAL BANK**
**New Orleans, La.**

**LAMBORN & COMPANY, INC.**
**Carondelet Building**
**New Orleans, La.**

**LEBOURGEOIS BROKERAGE CO.**
**823 Perdido Street**
**New Orleans, La.**

**THE NATIONAL BANK OF COMMERCE**
**New Orleans, La.**

**PENICK & FORD LTD., INC.**
**National Bank of Commerce Bldg.**
**New Orleans, La.**

**ESSO STANDARD OIL COMPANY**
**(Louisiana Division)**
**P. O. Box 1250 New Orleans 10, La**

**STANDARD SUPPLY & HARDWARE CO., INC.**
**822 Tchoupitoulas St.**
**New Orleans, La.**

**STATE AGRICULTURAL CREDIT CORP., INC.**
**837 Whitney Building**
**New Orleans, La.**

**WHITNEY NATIONAL BANK**
**New Orleans, La.**

633.61 Su35
La. State University Library
Acquisitions Dept.
Baton Rouge 3, La.
LOUISIANA STATE UNIVERSITY CHEMISTRY LIBRARY

# THE SUGAR BULLETIN

38—No. 4 NOVEMBER 15, 1959

*ial Bulletin of the American Sugar Cane League of the U. S. A.*

PRINTED ON PAPER MADE FROM
LOUISIANA SUGAR CANE BAGASSE

## *In This Issue*

Up Front With The League ..... 43
**The Old Mule—Recognition Luncheon—Picture Of A Winner—Field Wages**

In The Field With Lloyd L. Lauden ..... 44

In Washington With Joe Ferris ..... 45

Flowering And Breeding Performance Of Container-Grown Sugarcanes Inducted To Floral Initiation Under Natural Exposures At Canal Point, Florida ..... 46

Quota 9,400,000 Tons ..... 54

Weekly Average Prices ..... 55

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry

THE SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Edito

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

Issued on the 1st and 15th of each month. Subscription: Member 50 cents a year. Non-Members $3.00 a year.

Washington Office, 510 Union Trust Bldg., Washington, D. C.
Josiah Ferris, Manager

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
W. F. Giles, Jeanerette, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

# UP FRONT WITH THE LEAGUE

*by A. W. Dykers*

## The Old Mule

It has been a long time since our gar market character, the Ole ule, has paid less attention to road ocks than he has this year. We ought, for sure, that when the mule inner increased the load to 9,400,-0 tons on October 21st our critter uld lose his composure, but the lwart beast simply took an extra of-hold and stayed put.

We have heard it said that trouble ahead when 1960 quota sugars af-ct the "spot" quotation. This could true, too, because today, Novem-r 10th, 1960 quota sugars are sell-g about 30 points under the present 57 New York 1959 spot quotation.

We will just have to wait to see w the Old Mule behaves on his 60 diet but, even if he finally lls up with colic, he's done all ght up to now and deserves our ngratulations.

## Recognition Luncheon

Every couple of years the Cham-r of Commerce of the New Orleans rea promotes a luncheon for the uisiana Congressional Delegation nich other organizations in the area e invited to co-sponsor. The lun-eon is called a "Recognition Lun-eon" and the American Sugar Cane ague has always been happy and nored to co-operate in paying this mpliment to Senators Ellender and ng, Congressmen Boggs and Willis d the other fine people who look ter our interest in Washington.

The Recognition Luncheon is a Dutch-treat" affair, which means, course, that you buy your own cket. The cost is $3.00 per person. veryone is invited and we hope you d the whole family can attend.

If you can make it, send a check ade payable to the Chamber of Commerce of the New Orleans Area for $3.00 per person—the more the merrier—to the League office and the folks here will do the rest.

The date is Monday, November 23rd, the time is 12 noon and the place is the huge International Room of the Roosevelt in New Orleans. Senator James Eastland, of Mississippi, will be the principal speaker.

## Picture Of A Winner

On page 53 of this issue we are printing the picture of Mr. Andrew Gonsoulin, of New Iberia, who, with his two brothers and late father, averaged 36.6 tons of cane per acre on 103.7 acres to win the 1958 High Yield Award in the 100 to 199.9 acreage group of District 2. (Iberia and St. Mary Parishes). Mr. Gonsoulin's picture was not among those printed in our October 1st issue because it was not available.

It is interesting to note that all the cane used on the Gonsoulin farm was heat treated for control of the stunting disease, that adequate amounts of complete fertilizer were used, and that soybeans were planted in rotation with cane.

## Field Wages

A recent publication of the United States Department of Agriculture shows the average hourly wages paid to field workers during 1958 in Louisiana, Florida, Hawaii, Puerto Rico, and the Beet Area to be as follows:

Louisiana 69 cents per hour, Florida 94.3 cents per hour, Hawaii $1.597 per hour, Puerto Rico 46.5 cents per hour, and the Beet Area 94.8 cents per hour.

In addition field workers received non-cash benefits valued at 2 to 4 cents an hour, except in Hawaii where the fringe benefits came to 47.6 cents per hour.

# IN THE FIELD WITH LLOYD LAUDE

*by Lloyd L. Lauden*

Recent surveys conducted by Dr. Robert Coleman, Plant Physiologist, U.S.D.A., Houma Station, and the writer and reports from many members of the Louisiana sugar industry show that considerable damage was done to cane in several areas by the November 7-8 freezes.

Cane in Avoyelles, Rapides, Lafayette, and Vermilion Parishes was severely hit by the freezes. Considerable damage to cane occurred in parts of other parishes. Lower Lafourche, St. Mary, St. Charles, and St. John Parishes appear least affected.

In some areas the damage is very general with most of the cane either mildly damaged or severely damaged. In other areas the damage is very spotty, with no definite pattern established. Within a given area, cane on one farm may be damaged only on the lighter soils near a stream. On another farm in the same area only the cane in heavy soils, as would normally expected, shows damage. On a third farm in the same area no pattern exists, nearby fields show wide differences in the degree of freeze damage.

It is very important for growers in freeze damaged areas to make a survey to determine which fields are more severely hurt so that these fields can be harvested as rapidly as possible. It is also very important to watch the topping operation from day to day to keep quality up.

Many growers have asked if it would be advisable to windrow or c freeze damaged cane far in advan of milling as a means of preservi quality. The answer to this questi is No! Experiments conducted Dr. Robert Coleman, Plant Physio gist, U.S.D.A. Houma Station, sh that it would be a mistake to cut windrow freeze damaged cane f later milling. In fact, the experime shows that freeze damaged ca keeps better if left standing un near milling time.

It is important that growers reminded that under the same te perature conditions thin stands cane will probably be more severe damaged than heavy stands of ca

It must be remembered that ce tain varieties of cane deteriora more rapidly than other varieties f lowing a freeze. C. P. 36-105 a C. P. 47-193 are the two varieti that deteriorate very rapidly follo ing freezes. These varieties shou be harvested as soon as possible f lowing a freeze. N. Co. 310 under t same temperature conditions will damaged less and will hold its qua ty longer than other varieties.

Again, growers in freeze damag areas must make a special effort check the topping operation clos from day to day to keep cane quali high. A survey of the fields to det mine the more severely damag fields for immediate cutting will p off.

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*

Regardless of where you go in ashington, the main topic of con- rsation is Fidel Castro and his test caper.

As of this date, November 10, 59, the latest is his brochure on the leged bombing of Havana last onth by Florida based aircraft. The astro publication has an illustrated ver which depicts jet bombers over avana under the caption — "As in earl Harbor". On the cover there also an inset showing hysterical, rror-stricken women with the tle—"Cuba Denounces Before the orld".

The pamphlet distributed by the astro Ministry of State charges that . S. based planes bombed and raffed defenseless Cuban citizens.

Mr. Castro's literary effort appar- ntly has penetrated so deeply into ne diplomatic epidermis of our own linistry of State, that we are now aking our turn in "Denouncing to ne World". Castro, we say, is guilty f publishing an offensive brochure, ull of inaccurate, malicious and mis- eading reports. Furthermore, ac- ording to our State Department, the uban brochure certainly was de- gned to create an atmosphere of ostility in Cuban-U. S. Relations and "propaganda of the worst kind."

Not to be outdone by Mr. Castro, uthors in our State Department romptly wrote a note to the Cuban ictator in which they denied cata- orically any idea that the United tates approved the flight of the old Cuban owned B-25 which scattered anti-Castro leaflets over Havana on the night of October 21st. Our State Department note said—"Intensive investigation showed the bomb bay of the B-25 was fitted with a permanent luggage rack which made it impossible for the plane to drop bombs. The investigators also found that the plane's automatic weapons positions had been permanently sealed so that no cannon or machine gun could have been mounted on the plane."

On the spot observers at the time of the alleged straffing of defenseless citizens in the streets of Havana reported that the persons injured by gun-fire were wounded by inexperienced Cuban police officers and soldiers who attempted to shoot down the low-flying planes with unfamiliar automatic weapons.

Anyway our Ministry of State seems to be more exercised over Mr. Castro's adventure into the world of literature than by his expropriation of American owned properties.

State Department officials point out that there are strong arguments against anything that could be regarded against Castro. "If we cut the Cuban quota some people will call us an international bully", they say. Others in our government feel that if we don't do something to Castro soon, the impression will spread throughout the world we are becoming a nation of "softies", and the property of United States citizens will not be respected anywhere.

# FLOWERING AND BREEDING PERFORMANCE OF CONTAINE GROWN SUGARCANES INDUCTED TO FLORAL INITIATION UNDER NATURAL EXPOSURES AT CANAL POINT, FLORIDA

*By P. H. Dunckelman, research agronomist, Crops Research Division, Agricultural Research Service, U. S. Department of Agriculture*

## Introduction and Objectives

In 1952, stools of flowering sugarcane grown in cans were incorporated into the sugarcane breeding program at Canal Point as a routine technique.[5] Fourteen indoor crosses of the 1953 C.P. series,[6] involving 55 male-sterile tassels which were developed, cross-pollinated with male-fertile varieties, and matured to seed in can cultures, produced 46,693 viable seed, or 847 per tassel, the highest for any technique used that season. During the 1957 crossing season, 65 can-developed male-sterile tassels used in a series of 27 bi-parental crosses, produced 18,115 viable seed, or 278 per tassel, which is a relatively substantial number, considering the very adverse weather conditions to which the tassels had been subjected just prior to pollination. A limited number of tassels produced in cans were made to retain male-fertility by timely subjection to favorable indoor conditions during the winter of 1957, the coldest in Florida's history.

Since 1925, galvanized cans or tubs have been used at Canal Point to confine to captivity wild canes of the *Saccharum spontaneum* group (Fig. 1). Varieties of this species form lateral prostrate stems at ground level, or rhizomes, and produce new plants, finally resulting in large cane brakes, which get out of control. More recently certain species of Imperata, Sclerostachya, and Miscanthus, wild relatives of sugarcane, have been grown in tube for confinement. In 1939, canes cultured in galvanized cans and earthenware crocks were used in photoperiod experiments at Canal Point.[2]

Prior to 1958, no comprehensive evaluation had been made of flowering and indoor breeding performan of canes initiating floral primord in containers under natural exp sures at Canal Point. Due to the m jor shift from outdoor to indo crossing during 1957, and the i pending construction of facilities d signed especially for indoor cro ing, the use of container-develop breeding canes has become more i portant because of the relative ea with which they can be afford protection. With these facts in mir it was decided that an investigati be made to determine the degree flowering efficiency and the bree ing performance of a relatively lar number of clones grown in cans a clay pots during 1958.

## Methods and Procedures

On November 18, 1957, 171 pc ous clay "begonia" pots of 5-gall capacity were planted with 12 va eties of sugarcane currently reco mended as parents for Louisian Florida, and sirup-area crosses (tab 1). The soil mixture used was 60 organic muck, 30% sand, and 10 German peat, by volume. The pc were spaced about 2 feet apart in warm area of the field near the lak front ridge.

During the period January 13 28, 1958, 485 galvanized cans 10-, 15-, and 20-gallon capacity we planted with 76 select breeding clon All cans had been coated inside wi asphalt varnish as protection again zinc toxicity. A soil mixture of 70 organic muck and 30% sand w used in all except 38 cans, whe pure sand was used in planting 10 the so-called "difficult" floweri canes, i.e., difficult under prese methods of handling certain varieti at Canal Point. Because of extrem

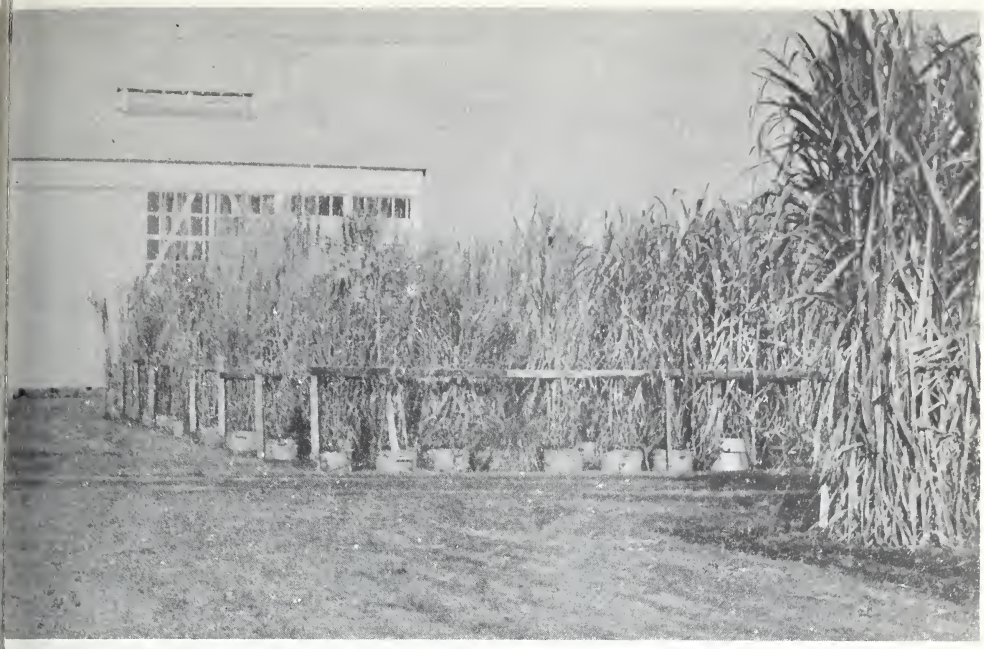


**Fig. 1 Wild canes growing in tubs at Canal Point, Florida.**

y adverse weather conditions during he period of germination and for 6 veeks after the young plants come ıp, only 242 of the can cultures, com-ɔrising 60 varieties, survived (table 2). The established plants in the clay ɔots, growing nearer the lake-front, were all saved.

With the coming of favorable veather about March 1, 1958, special ıttention was given the canes grow-ng in cans and pots throughout the remainder of the growing season. During the first week in March, April, and May, the canes in the clay begonia pots were fertilized with ɔne heaping tablespoonful of 8-10-20 containing manganese sulphate as MnO (1.50%), zinc sulphate as ZnO (.70%), copper oxide as CuO (1.00%), and borax as $B_2O_3$ (.50%). This fertilizer mixture also contained 2.4% of quarter-strength aldrin for control of soil insects. All plants in galvanized cans, regardless of soil-holding capacity, were fertilized with 2 heaping teaspoonfuls of this mix-ture. On June 1 and July 10, 1958, all were again fertilized, but nitro-gen was eliminated because of the apparent inhibitory effect which this element has on floral initiation when applied shortly in advance of the period of differentiation from vege-tative to reproductive condition. No fertilizer was applied after July 10.

On April 5, 1958, the canes grow-ing in the containers were carefully observed; suckers and weak stalks were pulled out by hand or cut out with pruning knives, leaving only the most uniform, vigorous stalks. There-after, suckers were pulled out syste-matically every 2 weeks, and on Au-gust 1, 1958, a final elimination of weak stalks was made, leaving an average of 4 stalks per can and 3 per clay pot, the numbers in individual containers varying from 1 stalk to as many as 10 stalks in a few of the larger containers.

As the growing season progressed and the canes began to lodge, a stake was driven into the soil in each pot and can and the stalks of cane tied upright with manila binder twine. All the containers were then tied to temporary racks constructed in a

**TABLE 1. Performance Record of Twelve Commercial Breeding Canes Grown in Five-gallon Clay Pots at Canal Point, Florida.**

| Variety | Number of Pots | Number of Stalks | Number of Stalks Booted | Date of First Emergence | Number of Stalks Flowered | Per Cent of Stalks Flowered* | Number Tassels Set in Crosses Female | Male | Number of Crosses Involved | Estimated Number of Seed |
|---|---|---|---|---|---|---|---|---|---|---|
| C.P. 29-320 | 10 | 28 | 17 | 1-9-59 | 8 | 28.5 | - | - | - | - |
| C.P. 36-105 | 5 | 16 | 13 | 12-14-58 | 10 | 62.5 | - | - | - | - |
| C.P. 44-155 | 25 | 73 | 71 | 11-22-58 | 70 | 95.9 | 68 | - | 8 | 72,290 |
| C.P. 47-193 | 5 | 12 | 8 | 1-26-59 | 4 | 33.3 | - | - | - | - |
| C.P. 48-103 | 25 | 80 | 75 | 11-16-58 | 72 | 90.0 | 61 | - | 10 | 51,300 |
| C.P. 48-126 | 15 | 45 | 45 | 11-21-58 | 45 | 100.0 | - | 41 | 4 | 30,826 |
| C.P. 50-28 | 15 | 61 | 60 | 11-22-58 | 56 | 91.8 | 44 | - | 7 | 21,660 |
| C.P. 50-41 | 8 | 25 | 25 | 12-8-58 | 23 | 92.0 | 21 | - | 4 | 13,307 |
| C.P. 52-1 | 15 | 35 | 35 | 11-23-58 | 35 | 100.0 | 28 | - | 7 | 29,046 |
| C.P. 52-15 | 15 | 49 | 49 | 12-5-58 | 35 | 71.4 | 12 | - | 2 | 12,268 |
| C.P. 52-68 | 15 | 53 | 53 | 12-12-58 | 33 | 62.2 | 33 | - | 4 | 34,715 |
| C.P. 53-18 | 18 | 51 | 45 | 12-7-58 | 43 | 84.3 | 24 | - | 4 | 14,350 |
| Totals or Averages | 171 | 528 | 496 | - | 434 | 82.2 | 291 | 41 | 50 | 279,662 |

* Based on number of stalks grown.

protected area of the field (fig. 2) to prevent them from being blown down by strong winds, which frequently occur in the Lake Okeechobee area from August to February each season. Each pot and can was given a permanent number and the number of stalks in each container was recorded on a master chart as a numerical basis for accumulation of data on floral initiation and development, panicle emergence, flowering, crossing usage, and seed production. Summaries of these data, presented in tables 1 and 2, will be more fully discussed later in this paper.

Because of the limited number of stalks which can be produced in the restricted space afforded by cans and pots, it is necessary to take every possible advantage to cause as many stalks as possible to flower. In the early stages of growth the sugarcane borer, a prime enemy of stools of cane grown in cans at Canal Point, was kept under excellent control by bi-weekly applications of 2% endrin granules. When the canes became larger, fairly heavy applications of 40% ryania dust were made every 10 days. The change from endrin to ryania was made because ryania dust was easier to apply with the available dusting equipment. Good overall control was attained.

An important consideration in the maintenance of large numbers of container-cultured canes is the watering (irrigation) problem. Th task must be performed regular and discretely. The plants must n be allowed to dry to the firing poin or be overly irrigated to the exte that they are constantly waterlogge Eight weeks before floral initiatio emphasis was placed upon waterir excessively until initiation had o curred in the majority of the clon under observation.

Investigations at Canal Point a early as 1929 [1] indicated that floo ing of the roots of tub-cultured can in water-filled concrete vats, befo initiation of flowering and durir the flowering period, brought abo a predisposition for more prolif flowering, but did not influence th time of flowering, which was th same for any variety in floode tanks, in the control tank, and i the field, under all conditions. Flov ering of sugarcane was accelerate under field conditions at Canal Poi during the fall and winter of 1947 a a result of high temperatures an flood waters.[3] Recent investigatio in India [8] indicate that a number thick non-flowering cane varieti produce normal and healthy flowe under conditions of profuse wate ing, particularly when nitrogenou manuring is completely eliminate Other investigations in India [4] ind cate that flowering behavior of ear and late varieties is markedly infl enced by irrigation rather than ma

**TABLE 2. Performance Record of Sixty Commercial Breeding Canes Grown in Large Galvanized Cans at Canal Point, Florida.**

| Variety | Number of Cans | Number of Stalks | Number of Stalks Booted | Date of First Emergence | Number of Stalks Flowered | Per Cent of Stalks Flowered* | Number Tassels Set in Crosses Female | Male | Number of Crosses Involved | Estimated Number of Seed |
|---|---|---|---|---|---|---|---|---|---|---|
| P. 29-320 | 4 | 18 | 18 | 12-5-58 | 14 | 77.7 | 8 | - | 2 | 9,086 |
| P. 34-79 | 2 | 9 | 5 | 1-7-59 | 3 | 33.3 | 2 | - | 1 | 15 |
| P. 38-34 | 4 | 14 | 14 | 11-9-58 | 14 | 100.0 | - | 14 | 5 | 23,136 |
| P. 43-64 | 3 | 6 | 6 | 11-16-58 | 4 | 66.6 | - | 2 | 3 | 11,085 |
| P. 43-74 | 4 | 15 | 15 | 11-24-58 | 14 | 93.3 | - | - | - | - |
| P. 44-154 | 3 | 26 | 7 | - | 0 | 0.0 | - | - | - | - |
| P. 44-155 | 10 | 40 | 40 | 11-15-58 | 40 | 100.0 | 14 | 24 | 10 | 22,238 |
| P. 45-73 | 5 | 25 | 25 | 11-15-58 | 25 | 100.0 | - | 8 | 1 | 3,886 |
| P. 46-115 | 3 | 11 | 11 | 11-5-58 | 11 | 100.0 | - | 11 | 2 | 11,440 |
| P. 48-103 | 21 | 90 | 87 | 11-8-58 | 87 | 96.6 | 74 | 9 | 11 | 61,935 |
| P. 48-117 | 2 | 8 | 8 | 12-4-58 | 8 | 100.0 | - | - | - | - |
| P. 48-126 | 7 | 30 | 30 | 11-15-58 | 30 | 100.0 | - | 22 | 4 | 11,391 |
| P. 50-28 | 1 | 6 | 6 | 11-17-58 | 6 | 100.0 | 5 | - | 1 | 2,615 |
| P. 50-37 | 1 | 5 | 4 | 11-25-58 | 4 | 80.0 | - | - | - | - |
| P. 51-21 | 2 | 8 | 8 | 11-24-58 | 7 | 87.5 | - | - | - | - |
| P. 52-1 | 11 | 51 | 51 | 11-16-58 | 48 | 94.1 | 38 | - | 7 | 39,846 |
| P. 52-15 | 6 | 29 | 26 | 11-13-58 | 26 | 89.6 | - | 12 | 5 | 5,489 |
| P. 52-35 | 3 | 8 | 0 | - | 0 | 0.0 | - | - | - | - |
| P. 52-36 | 3 | 17 | 17 | 11-23-58 | 17 | 100.0 | - | 17 | 4 | 31,393 |
| P. 52-68 | 6 | 26 | 26 | 11-17-58 | 5 | 19.2 | - | - | - | - |
| P. 52-76 | 1 | 4 | 4 | 11-6-58 | 4 | 100.0 | - | 4 | 1 | 1,596 |
| P. 52-114 | 4 | 10 | 10 | 11-24-58 | 10 | 100.0 | - | 10 | 4 | 15,500 |
| P. 53-16 | 7 | 27 | 27 | 11-16-58 | 23 | 85.1 | - | 10 | 2 | 12,972 |
| P. 53-18 | 5 | 16 | 15 | 11-23-58 | 7 | 43.7 | - | - | - | - |
| P. 53-19 | 3 | 8 | 8 | 11-30-58 | 7 | 87.5 | - | 2 | 1 | 2,460 |
| P. 55-3 | 1 | 2 | 2 | 1-28-59 | 2 | 100.0 | - | - | - | - |
| P. 55-7 | 1 | 4 | 4 | 11-21-58 | 4 | 100.0 | - | - | - | - |
| P. 55-9 | 3 | 10 | 9 | 12-26-58 | 8 | 80.0 | - | - | - | - |
| P. 55-12 | 3 | 13 | 10 | 1-15-59 | 3 | 23.0 | - | - | - | - |
| P. 55-13 | 3 | 9 | 9 | 11-22-58 | 9 | 100.0 | - | - | - | - |
| P. 55-14 | 2 | 8 | 8 | 12-7-58 | 8 | 100.0 | - | - | - | - |
| P. 55-15 | 3 | 10 | 10 | 12-1-58 | 9 | 90.0 | - | 5 | 3 | 874 |
| P. 55-24 | 1 | 4 | 3 | 11-28-58 | 2 | 50.0 | - | - | - | - |
| P. 55-30 | 9 | 35 | 34 | 12-1-58 | 32 | 91.4 | 24 | - | 5 | 25,132 |
| P. 55-31 | 1 | 4 | 3 | 12-7-58 | 2 | 50.0 | - | - | - | - |
| P. 55-36 | 2 | 7 | 7 | 11-18-58 | 6 | 85.7 | - | - | - | - |
| P. 55-37 | 5 | 19 | 18 | 11-24-58 | 16 | 84.2 | - | - | - | - |
| P. 55-38 | 6 | 19 | 19 | 11-15-58 | 19 | 100.0 | 17 | - | 3 | 7,236 |
| P. 56-8 | 1 | 5 | 5 | 12-15-58 | 4 | 80.0 | - | - | - | - |
| P. 56-16 | 6 | 30 | 30 | 11-25-58 | 26 | 86.6 | - | - | - | - |
| P. 56-27 | 2 | 9 | 9 | 11-18-58 | 8 | 88.8 | - | - | - | - |
| P. 56-36 | 4 | 15 | 14 | 12-18-58 | 12 | 80.0 | - | - | - | - |
| P. 57-4 | 1 | 1 | 0 | - | 0 | 0.0 | - | - | - | - |
| P. 57-20 | 6 | 26 | 26 | 12-3-58 | 18 | 69.0 | 5 | - | 1 | 684 |
| P. 57-21 | 6 | 29 | 27 | 11-17-58 | 27 | 93.1 | - | 27 | 6 | 23,332 |
| P. 57-35 | 7 | 34 | 32 | 1-14-59 | 18 | 52.9 | - | - | - | - |
| 39246 | 3 | 9 | 7 | 11-9-58 | 7 | 77.7 | 4 | - | 1 | 1,085 |
| . 11569 | 4 | 11 | 0 | - | 0 | 0.0 | - | - | - | - |
| . 47-83 | 4 | 11 | 11 | 12-30-58 | 8 | 72.7 | 3 | - | 1 | 45 |
| . 290 | 2 | 8 | 8 | 12-4-58 | 8 | 100.0 | 8 | - | 2 | 4,266 |
| . 617 | 4 | 16 | 7 | 1-27-59 | 2 | 12.5 | - | - | - | - |
| 36-819 | 5 | 13 | 13 | 12-27-58 | 5 | 38.4 | - | - | - | - |
| 55-6 | 2 | 10 | 9 | 1-13-59 | 9 | 90.0 | - | - | - | - |
| 55-9 | 3 | 17 | 15 | 11-23-58 | 10 | 58.8 | - | - | - | - |
| 55-11 | 1 | 5 | 5 | 1-29-59 | 1 | 20.0 | - | - | - | - |
| 55-13 | 1 | 4 | 4 | 11-22-58 | 4 | 100.0 | - | - | - | - |
| 55-17 | 5 | 23 | 23 | 11-20-58 | 22 | 95.6 | - | - | - | - |
| 56-27 | 1 | 7 | 7 | 11-15-58 | 7 | 100.0 | 7 | - | 1 | 3,600 |
| 57-9 | 3 | 12 | 8 | - | 0 | 0.0 | - | - | - | - |
| O.J. 3016 | 10 | 33 | 0 | - | 0 | 0.0 | - | - | - | - |
| tals or erages | 242 | 979 | 864 | - | 730 | 74.6 | 209 | 177 | 84 | 332,337 |

Based on number of stalks grown.

ure, the intensity of flowering be- g greater under daily irrigation. has been shown decisively in Ha- aii [7] that if irrigation is stopped rly enough in August to reduce oisture in the plant to a proper vel in mid-September, flowering ill be prevented completely.

When it is certain that floral initiation has occurred, the cans and pots with their well-established plants can be moved indoors, placed on carts for rapid and timely manipulations under more favorable conditions, or handled in any manner deemed desirable, with almost complete assurance of freedom from the physiological shock and resulting

**Fig. 2 Container-grown breeding canes tied to temporary racks constructed in the field.**

abortion of the inflorescence which often accompanies the removal of marcots and airlayers from the field and their establishment in the greenhouse.

## Observations and Results

The removal, at regular intervals, of suckers and weak stalks from the stools of canes growing in cans and pots allowed the few select remaining stalks to grow more vigorously and to attain greater uniformity then where this practice was not performed. Stalk competition was held to a minimum. The crowding effect was greatly reduced and the thin stand of stalks in the spaced containers allowed almost full exposure to the sun's rays and free movement of air among the plants. It was noted during this investigation that the greater degree of uniformity of stalk size and stalk vigor within a given can or pot, the greater the degree of simultaneous flowering (fig. 3). In numerous instances, various stages of floral development, from early elongation to full-glow panicles, may occur at the same tim in a particular container (fig. 4) this condition is disadvantageou from the standpoint of efficiency full-scale and timely utilization male - sterile tassels for crossin Male-fertile tassels may be cut fro the containers as they bloom, place in weak acid solution, and used the ordinary manner.

Greater overall vigor was attaine by the stalks of canes growing the 10-, 15-, and 20-gallon ash ca than by canes growing in the 5-ga lon porous clay begonia pots. July 1, 1958, growth in cans equalle growth in pots, even though the can in pots were 2 months older. On slightly significant differences vigor were observed in the can growing in the galvanized cans various sizes. The plants in the gallon pots apparently became bad root-bound during their tenth mon of growth. On September 5, at a proximately the beginning of the p

ig. 3 Uniform tassel development in C.P. 48-103 growing in galvanized cans.

iod when differentiation from vege-ative to reproductive condition oc-urs in a majority of the breeding anes at Canal Point, and when erminal vegetative elongation is hecked, the canes in cans were bout 12 to 18 inches taller than hose in pots. This increase in vigor n can-grown canes over those in the maller pots was evident from an verall standpoint, with any specific ariety included in this investiga-ion. By October 1, 1958, pronounced ellowing of the leaves of practically ll canes growing in the containers

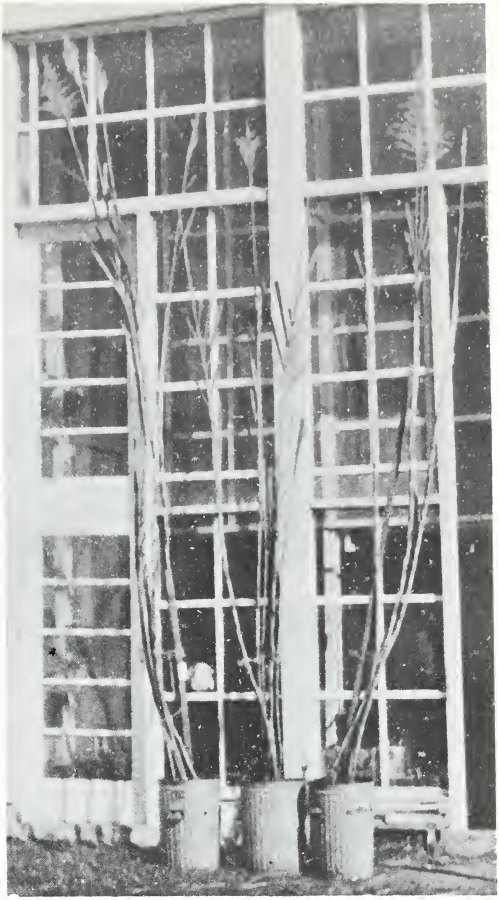


Fig. 4 Irregular tassel development in C.P. 57-21 growing in galvanized cans.

was evident, and the "mature appearance" was apparent. These conditions, contrasting considerably with canes growing in the field adjacent to the cans and pots, are probably attributable to withdrawal of fertilizer (principally nitrogen) 3 months prior to, and to excessive watering during, the period July 10 through October 5, 1958.

On October 6, 16 varieties of sugarcane growing in the galvanized cans and 11 varieties in the clay pots were examined, by cutting into the growing points, to determine whether panicle primordia were present. Stalks less likely to flower, from outward appearances, were chosen for inspection, the better-looking

stalks being conserved for possible use in crosses later. Upon inspection of the growing points, well-defined initials were found in practically every stalk of each variety examined. These varieties were to a large extent representative of the early- and intermediate - flowering sugarcanes currently being used in the breeding program at Canal Point. On October 21, 1958, 6 varieties of sugarcane, somewhat representative of the more difficult, sparse, or non-flowering types desired for use in the breeding work at the Canal Point station, were examined for floral initials. All of these varieties (Co. 290, F. 36-819, C.P. 29-320, Co. 617, Cl. 47-83, and C.P. 34-79) had well-defined floral initials. Three of the earlier-flowering group of canes, C.P. 45-73, C.P. 46-115, and C.P. 48-103, all early high-sucrose varieties, were beginning to boot, and 41 varieties growing in the containers were showing definite signs of short-leafing, with the top leaves assuming an almost perpendicular position.

Beginning with the first variety, C.P. 46-115, which emerged in containers on November 5, 1958, careful day-by-day records were kept on flowering and on the disposition of the flowering canes relative to the crossing program (tables 1 and 2).

In every instance involving 9 specified clones growing in both galvanized cans and clay pots, emergence of the inflorescences invariably occurred earlier in the cans, which by volume contained two to four times as much soil as the 5-gallon clay pots. As may be seen (tables 1 and 2) by comparing the dates of emergence of C.P. 29-320, C.P. 44-155, C.P. 48-103, C.P. 48-126, C.P. 50-28, C.P. 52-1, C.P. 52-15, C.P. 52-68, and C.P. 53-18, the time for emergence varied as little as 6 days for C.P. 48-126 to as much as 35 days for C.P. 29-320.

Throughout the flowering period of the container-grown canes under observation, secondary shoots normally flowered later than primary shoots, in several varieties as much as 3 to 5 weeks later in the same cor tainers. This condition, dovetaile with other manipulations aimed a synchronizations of flowering, coul conceivably help to spread the flow ering period of a given variety t cover a wider range of crossing pc tentialities.

## Summary and Conclusions

Table 1 shows that 82.2% of th 528 stalks grown in the clay pot actually flowered; 332 panicles, o 62.9%, were utilized as males an females in 50 bi-parenteral crosse which produced an estimated total c 279,662 viable seed.

As may be seen in table 2, 74.6% of the 979 stalks grown in large ga vanized cans flowered under natura exposures at Canal Point. Utilizatio of 386 panicles (39.4% of the initia number grown) in 84 bi - parenta crosses, both as male and femal types, resulted in a total estimate production of 332,337 viable tru seed.

From 134 bi-parental crosses mad possible from flowering canes grow in galvanized cans and clay pot 611,999 viable true seed (estimate were produced. This figure (611,999 represents 31.52% of the estimate grand total of 1,941,588 viable tru seed of sugarcane produced at Cana Point during the 1958 crossing sea son.

Of the total of 1,164 stalks whic flowered in containers, only 718, o 61.7%, were actually used in crosses 446 panicles were not used becaus of lack of indoor space at certai times, or because of availability o plenty of airlayered and marcote tassels that were more readily acce sible and easier to use, or becaus of utilization of more desirable fiel material in particular crosses.

Floral induction and panicle pr duction occurred intensely in a larg majority of breeding canes grown i containers under natural exposure at Canal Point (fig. 5), where spe cial considerations were given to irr gation, fertilization, pruning, an insect control. Three clones (C

ig. 5 Natural flowering of canes growing in containers at Canal Point.

90, Co. 617, and C.P. 34-79) flowred in cans at Canal Point during ne winter of 1958-59, but failed to lower or show signs of flowering at ny time during the season under ield conditions at the Canal Point tation.

## Literature cited


Sartoris, G. B. General summary of the breeding work for the season of 1929-30 at Canal Point, Florida. (Unpublished) Feb. 4, 1930. Canal Point Experiment Station permanent file.

Brandes, E. W., and J. Matz. Problems and progress in breeding temperate zone sugar cane. Sugar Jour. 2(6): 3-6. 1939.

Sartoris, G. B., and B. A. Belcher. The effect of flooding on flowering and survival of sugar cane. Sugar 44: 36-39. January 1949.

Vijayasaradhy, N., and Narasimhan. Control of flowering in sugarcane. Proc. I.S.S.C.T. 8: 371-401. 1953.

Grassl, C. O., and B. A. Belcher. Sugarcane breeding techniques practised at Canal Point, Florida. Proc. I.S.S.C.T. 8: 443-451. 1953.

Dunckelman, P. H., C. O. Grassl, and B. A. Belcher. A report on the production of true seed of sugarcane and the employment of new breeding techniques at Canal Point, Florida, for the season of 1953. The Sugar Bul. 32 (22): 364-366. August 15, 1954.

[7] Burr, G. O., C. E. Hartt, H. W. Brodie, T. Tanimoto, H. P. Kortschak, D. Takahashi, F. M. Ashton, and R. E. Coleman. The sugarcane plant. Ann. Rev. Applied Physiol. 8: 275-308. 1957.

[8] Yusuf, N. D. The control of arrowing and fuzz production in sugar cane under sub-tropical conditions. The Internat. Sugar Jour. LX(716): 219-221. August 1958.

Andrew Gonsoulin of New Iberia


*"Sugar Factory Insurance Specialists"*

**GILLIS, HULSE and COLCOCK, Inc.**

839 Union St. New Orleans, La.

Telephone JA 2-1225

# QUOTA 9,400,000 TONS

On October 20th the U. S. Department of Agriculture announced an increase of 100,000 tons in the estimate of domestic sugar requirements for 1959. This raised total quotas to 9,400,000 tons.

The increase in total quotas was made to provide needed supplies of sugar to the Northeast.

The Statement of Bases and Considerations for this action follows:

"On Sept. 3, sugar quotas were increased 100,000 tons to a total of 9,300,000 tons. On Sept. 28, authorization was given to import and re fine over-quota sugar under bond t be held in inventory until Jan. 1960. Distribution has continued a a high level and the price of ra sugar has risen further to 6.57 cent per pound on Oct. 15. Clearly, add tional quota supplies are needed. Ac cordingly, total quotas are hereby in creased to 9,400,000 tons."

The new quotas and quantities tha may be brought in for direct con sumption are shown in the followin table:

**1959 SUGAR QUOTAS AND "D. C. LIMITS"**

| Area and Country | Proration of Hawaiian, Puerto Rican, Virgin Islands Deficits (Short tons, raw value) | New Quotas Adjusted for Proration of Deficits | Change from Previous Quotas | Direct Consumption Limits |
|---|---|---|---|---|
| Domestic beet sugar | 204,166 | 2,225,264 | 56,031 | no limit |
| Mainland cane sugar | 62,823 | 684,735 | 17,241 | no limit |
| Hawaii | (150,000) | 977,970 1/ | (37,509) | 31,755 |
| Puerto Rico | (209,562) | 969,875 1/ | 0 | 137,637 |
| Virgin Islands | (3,678 | 12,405 1/ | 0 | 0 |
| Republic of the Philippines | 0 | 980,000 | 0 | 59,920 |
| Cuba | 96,251 | 3,186,316 | 48,827 | 375,000 |
| Peru | | 91,197 | 4,330 | 9,961 |
| Dominican Republic | | 76,507 | 4,950 | 8,880 |
| Mexico | | 59,709 | 5,100 | 16,130 |
| Nicaragua | | 13,453 | 574 | 10,637 |
| Haiti | | 6,806 | 209 | 6,806 |
| Netherlands | | 3,662 | 70 | 3,662 |
| China | | 3,564 | 59 | 3,564 |
| Panama | | 3,564 | 59 | 3,564 |
| Costa Rica | | 3,557 | 59 | 3,557 |
| Canada | | 631 | 0 | 631 |
| United Kingdom | | 516 | 0 | 516 |
| Belgium | | 182 | 0 | 182 |
| British Guiana | | 84 | 0 | 84 |
| Hong Kong | | 3 | 0 | 3 |
| All other countries | | 0 | 0 | 0 |

[1] Despite declaration of deficits, the full quotas of 1,127,970, 1,179,437 and 16,083 short tons, raw value, for Hawaii, Puerto Rico and the Virgin Islands, respectively, are available to these areas.

## Commercial Members of the AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC.

**AMERICAN CYNAMID CO.**
30 Rockefeller Plaza
New York, N. Y.

**AMERICAN MOLASSES CO., OF LOUISIANA, INC.**
400 N. Gayoso St.
New Orleans, La.

**HARRY L. LAWS & CO., INC.**
126 Carondelet Street
New Orleans 12, La.

**THE HIBERNIA NATIONAL BANK**
New Orleans, La.

**LAMBORN & COMPANY, INC.**
Carondelet Building
New Orleans, La.

**LEBOURGEOIS BROKERAGE CO.**
823 Perdido Street
New Orleans, La.

**THE NATIONAL BANK OF COMMERCE**
New Orleans, La.

**PENICK & FORD LTD., INC.**
National Bank of Commerce Bldg.
New Orleans, La.

**ESSO STANDARD OIL COMPANY**
(Louisiana Division)
P. O. Box 1250 New Orleans 10, La.

**STANDARD SUPPLY & HARDWARE CO., INC.**
822 Tchoupitoulas St.
New Orleans, La.

**STATE AGRICULTURAL CREDIT CORP., INC.**
837 Whitney Building
New Orleans, La.

**WHITNEY NATIONAL BANK**
New Orleans, La.

## Weekly Average Prices

The weekly average prices issued by the Louisiana Sugar Exchange since the start of the 1959-60 Louisiana Pricing Period have been as follows:

Week ending October 15, 1959
Raws 6.515, Blackstrap 9.69

Week ending October 22,. 1959
Raws 6.53, Blackstrap 9.625

Week ending October 29, 1959
Raws 6.52, Blackstrap 9.675

Week ending November 5, 1959
Raws 6.52, Blackstrap 9.69

Week ending November 12, 1959
Raws 6.50, Blackstrap 9.73

Average through November 12, 1959
Raws 6.5170, Blackstrap 9.6820

---

**STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACTS OF CONGRESS OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, AND JULY 2, 1946**

**(Title 39, United States Code, Section 233)**

Of The Sugar Bulletin, published semi-monthly at New Orleans, La., for October 1, 1959, State of Louisiana, Parish of Orleans.

Before me, a Notary Public in and for the State and parish aforesaid, personally appeared Gilbert J. Durbin, who, having been duly sworn the Editor of the Sugar Bulletin and that the following is, to the best of his knowledge and belief, a true statement of the ownership. management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Acts of March 3, 1933, and July 2, 1946, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to wit.

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, The American Sugar Cane League of the U. S. A., Inc., New Orleans, La.; Editor, Gilbert J. Durbin, New Orleans, La.; Managing Editor, Andrew W. Dykers; Business Manager, none.

2. That the owner is the American Sugar Cane League of the U. S. A., Inc., New Orleans, La.; Warren Harang, Jr., Thibodaux, La., President; Ed. Schexnayder, White Castle, La., Vice President; J. J. Shaffer, Houma, La., Secretary; F. Evans Farwell, New Orleans, La., Treasurer.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are none.

GILBERT J. DURBIN,
Editor.

Sworn to and subscribed before me this 25th day of September, 1959.

BRITTMAR P. LANDRY,
Notary Public.

(Seal)

(My commission expires at death.)

# 3¾% interest

# on New U.S. Savings Bonds

## now in effect

*and the Bonds you already own are better than ever, too!*

Now U.S. Savings Bonds are a better buy than ever in three important ways:

- *All Series E and H Bonds bought since June 1, 1959, now earn 3¾% interest when held to maturity.*
- *Older Bonds will also pay more—an extra ½%, from June 1 on, if you hold them to maturity.*
- *All Series E Bonds, old or new, now carry an automatic extension privilege; they'll keep paying liberal interest for 10 years beyond maturity.*

Three big new *dollar* benefits that make it smart to buy new Bonds—and hang on to the ones you have!

**40 million Americans now own Bonds**

But a good return isn't the only reason so many people buy Bonds. They've discovered that there's no easier, safer, more *American* way to save.

You can buy Bonds automatically, through the Payroll Savings Plan where you work; you can buy them at your bank; your youngsters can even buy them at school, through the School Savings Plan for U.S. Savings Stamps.

The U.S. Government guarantees that the cash value of your Bonds cannot drop; it can only grow. And if your Bonds should be lost, stolen, or destroyed, the Treasury will replace them free.

Finally, every Bond you buy does a big job for America. Because today peace costs money—money for military strength and for science; and money saved by individuals to keep our economy sound.

Your Bonds help provide this money—help America keep the peace. So, to build a brighter future for yourself and your family—and to *protect* it—save with U.S. Savings Bonds. They're better than ever.

HELP STRENGTHEN AMERICA'S PEACE POWER

# SAVE WITH U.S. SAVINGS BONDS

*The U.S. Government does not pay for this advertising. The Treasury Department thanks The Advertising Council and this magazine for their patriotic donation.*

ADVERTISING COUNCIL · PUBLIC SERVICE ·

La. State University Library
Acquisitions Dept.
Baton Rouge 3,La.

38—No. 5 DECEMBER 1, 1959

*cial Bulletin of the American Sugar Cane League of the U. S. A.*

PRINTED ON PAPER MADE FROM
LOUISIANA SUGAR CANE BAGASSE

## *In This Issue*

Up Front With The League ..... 59
**The Old Mule—USDA Building Burns—Sam H. Livaudais, Sr.—R. M. Murphy—Sam B. Dunbar**

In The Field With Lloyd L. Lauden ..... 60

In Washington With Joe Ferris ..... 61

President Harang Reports on Water Resourses ..... 62

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry

THE
# SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Editor

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

Issued on the 1st and 15th of each month. Subscription: Member 50 cents a year. Non-Members $3.00 a year.

Washington Office, 510 Union Trust Bldg., Washington, D. C.
Josiah Ferris, Manager

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
W. F. Giles, Jeanerette, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

# UP FRONT WITH THE LEAGUE

*by A W. Dykers*

## The Old Mule

Our market character, The Old Iule has been really clobbered since ur last report. On November 10th vhen we were bragging about his urability, the New York spot quotaion for raw sugar was 6.57 cents a undred pounds. Then the overuota jitters got our stalward beast nd down he went to 6.30 in a week's ime. This is descending almost as apidly as those nose cones our rocket xperts have been failing to catch as hey drop into the Pacific Ocean.

To add insult to injury, the freight ifferential from James E. Ward & o., used by the Louisiana Sugar Exhange in establishing New Orleans uotations in the absence of local ales, spread from five cents to ten ents a hundred pounds while the )ld Mule was in his reverse orbit, nd the New Orleans quotation tumled 32 points to 6.20 in the short eriod of seven days.

As we get ready to go to press with his issue of the *Bulletin* there apears to be a slight inclination on the art of the market to recover its comosure. The New Orleans quotation or raw sugar is 6.28 cents a hundred ounds, which is up eight points from he 6.20 low and some of the experts ook for a further advance in the rice of 1959 quota raws. Just what vill happen to 1960 quota sugars is he big question, however, as sales f sugars for early January delivery vill soon be making the "spot" quoation. The last reported sale of overuota Cubas was at 6.20 cents a hundred pounds, delivered to a New York efiner.

The rapid decline in the price of ugar coupled with the rapid spread n the freight differential must unuestionably be placed in the category of "revolting developments", Add to these the killing freezes and t is hard to find much to celebrate bout. But, anyway, have a Merry Christmas.

## USDA Building Burns

We are aware of course, that most everybody knows the USDA building in Alexandria was completely destroyed by fire during the early morning hours of November 19th. We ask your indulgence, however, while we record this event for posterity.

The building was the one-story brick structure built eight or nine years ago to house six USDA agencies, some including the office in charge of the sugar program, being moved from Baton Rouge to the new Alexandria location. The American Sugar Cane League objected to the move, but after a little while, became reconciled to the change and stopped fussing about it.

The original reports regarding the fire said that practically all the Government records housed in the building had been destroyed but later information indicates that this is not correct. The following letter was received today from the ASC office.

"Dear Mr. Durbin:

As you probably know, our State Office was destroyed by fire on November 19.

We are happy to announce that we have been able to relocate the office at 528 Monroe Street and have been able to maintain operations of essential programs during the change over. We are now equipped to function normally in our program and administrative operations.

Our new telephone number is HIllcrest 5-2461."

Very truly yours,

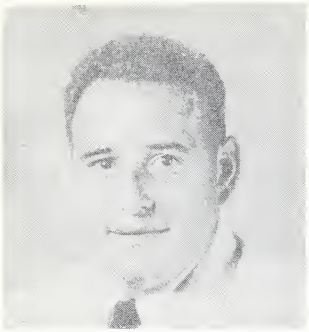
/s/ C. E. Slack

State Administrative Officer"

## S. H. Livaudais, Sr.—R. M. Murphy

Two men prominently connected with the selling of sugar in Louisiana for a great many years died during the month of November. They were Samuel H. Livaudais, Sr., who

(Continued on page 64)



# IN THE FIELD WITH LLOYD LAUDEN

*by Lloyd L. Lauden*

Another hard freeze on November 18 and 19 has caused more damage to Sugar cane in most of the cane growing areas of Louisiana. The lowest temperature reported was 22° F. Many areas received 25° F.

St Mary, St. John, St. Charles, and lower Lafourche Parishes are the least damaged areas. Lafayette, Vermilion, Avoyelles, and Rapides Parishes appear most severely damaged. Other parishes have a considerable amount of severely damaged cane.

Growers and processors must cooperate to the fullest extent to get the maximum of this damaged cane milled. Sugar factories can grind to the limit of capacity only if the product being milled is of good quality. Rotted tops, and cane which is sour or stale, reduce grinding rates very much. Clarification of the juice is next to impossible when poor quality cane is milled. Sugar recoveries go down under these conditions. As a result, everyone loses money.

The theory that a small amount of poor quality cane can be milled with other good quality cane and the result will be good is wrong. The opposite is true. Poor quality cane hurts good quality cane in the factory.

Factories and independent growers alike should check cane daily and from field to field to know the proper place to top cane. The cane stalk should be split in half, lengthwise, to see the extent of damage. The freezes broke the cell walls on the inside of some joints. Top joints which were not so sweet were dan aged more than lower joints. Whe the walls of cells inside a joint ar broken by a freeze the juice flow free inside the joint. Bacteria an other organisms can multiply an spread fast in this juice and that pa of the cane stalk deteriorates ra idly. All joints which are water soft, brownish in color, and have rotted sour smell and taste have a ready gone bad. Every attem should be made to top below th rotted area.

It is again important to remin growers that C. P. 36-105 and C. I 47-193 deteriorate rapidly followin freezes and these two varieties shoul be harvested as fast as possibl Lower sucrose varieties, such as C. I 44-154, Co. 290, and C. P. 29-11 should be harvested as rapidly as po sible. These varieties also deteriorat rapidly.

Under the same conditions, N. C 310 will be affected less and will hol up better following freezes than othe varieties. This is an excellent charac teristic in a variety and some con sideration should be given N. Co. 31 in most planting programs.

It is also important to emphasiz that windrowing cane for later mil ing is **not good.** Cane will deteriorat more rapidly after being cut tha when left standing. **Do not** windro cane.

It is hoped that cool dry weathe will prevail so that this crop can b saved with a minimum of loss.

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*

The annual hearing on the estimate sugar consumption for 1960, held Washington on November 24th, rovided the usual forum for free, ank praise or criticism of the Sugar ct, depending on whether the witess was a producer or a purchaser sugar. The major industrial users sugar, in their continued effort hold down prices, recommended a 960 quota of 9,800,000 short tons. he Secretary of Agriculture was harply criticised by industrial user okesmen for utilizing the Sugar ct to force up United States sugar ices. Industrial users also were eptical of Cuba's ability to fill her mitments to the United States, though official spokesmen for the uban Stabilization Institute and the . S. Cuban Sugar Council gave asrances that there would be adequate gar produced in Cuba next year to eet all United States requirements. Robert H. Shields, President and ashington representative of the . S. Beet Sugar Association was lected as spokesman by the proucers in Puerto Rica, Hawaii, Mainnd Cane and the Mainland Beet ea, to present a joint statement in half of domestic sugar producers. r. Shields was unexpectedly reuired to go to Tangier, Morocco for meeting of the International Sugar ouncil, and his statement was read Dr. Phillip E. Jones, Secretaryreasurer of the U. S. Beet Sugar Association. This joint statement of domestic producers recommended an initial quota for 1960 of 9,200,000 tons, equal to approximately the amount of sugar consumption in the United States for 1959.

The Statement pointed out that there is no reason for the Secretary of Agriculture to be concerned on the supply side of the sugar picture because there will be ample sugar produced to supply the American market during the coming year despite the possibility of continued social and political unrest in Cuba. The joint statement recommended that the Secretary of Agriculture continue to employ the administrative technique know as the "holdback". This technique was first used by the Department in 1952. It enables the Secretary to establish an initial estimate of consumption at a figure which he considers adequate to supply consumers throughout the year but to hold back several hundred thousand tons of the year's supply for use later in the year. The industry statement also suggested to the Secretary that he should consider the possibility of somewhat lower consumption as a result of prolonged strikes affecting major industries.

The Secretary of Agriculture will publish his estimate of 1960 sugar requirements sometime during the month of December, 1959.

# PRESIDENT HARANG REPORTS ON WATER RESOURCES

*Statement by Warren Harang, Jr., President of the American Sugar Can League of the U. S. A., Inc., before the Senate Select Committee on National Water Resources at Alexandria, La., December 1, 1959*

My name is Warren Harang, Jr. I am a sugar cane grower and President of the American Sugar Cane League of the U. S. A., a non-profit corporation of the State of Louisiana, created in 1922 for the purpose of protecting the welfare of Louisiana cane growers and processors. The membership of the League consists of about 5000 farmers who produce approximately 95% of the sugar cane grown in Louisiana and 40 processor members who process into sugar all the State's crop in their 46 cane factories.

Sugar cane is grown in 19 parishes of southern Louisiana. Most of it is produced on the alluvial soils of the Mississippi River Valley, some is grown on the alluvial soils of the Red River Valley, and some in the Gulf Coastal Plain Area.

The Louisiana sugar cane area has an annual rainfall of about 60 inches. To the casual observer it would not appear that one of our problems was availability and adequacy of water supply. Unfortunately, nature does not afford us this bountiful water supply properly dispersed through the year. Therefore, we need additional research along several lines which I will discuss briefly.

Research is needed to show us how to make the maximum and best use of the rainfall we receive. This should include studies of ways to increase the water holding capacity of soil. Deep tillage experiments now underway should be continued and expanded. The effect which various crops, used in rotation with cane, will have on our soils and their water holding capacities should be investigated. Vertical mulching on some of our problem soils should be tried. The effect of various chemicals on the texture of soils and their water holding capacities should be determined. Among the many new chemicals developed each year, one may found which we can economica use to improve soil texture. The is a place for more research in t matter of holding crop residues improve soil and water manageme Research is needed to determine t best method or methods to dispose the excess rainfall. We frequen get such an excess. We do not kn whether the system of ditching e ployed in the Louisiana sugar ca area is best for our conditions. F each of our soil types we need mo research to develop facts for use determining the proper distance b tween ditches and the proper dep width, shape, length, and grade each ditch.

Strange as it seems, we also reco mend research on irrigation. Ev though the Louisiana sugar cane ar has an annual rainfall of about inches, we have periods of inadequa moisture nearly every year duri our cane growing season. In so years our crops are very adverse affected by lack of water at the ti it is most needed. Experiments a needed to determine whether ov head, surface, or subsurface irrig tion would be best for our conditio and whether any type of irrigati would be economically feasible. E periments would be necessary to d termine proper timing for irrigati and the amount of water to ap at any given time.

Weather modification r e s e a r c seems worthy of more attention. W are naturally and vitally interest in any properly directed resear that might eventually lead to a pra tical method of obtaining additio rainfall when needed.

In considering research in wat conservation and use, it is most i portant to point out, in addition our agricultural requirements, t importance of water in the operati

Louisiana's 46 sugar cane mills. ırge quantities of fresh water are re essential. An average of 3000 llons of water per ton of cane is ed. At the peak of Louisiana's 65 .y cane harvest, the mills grind )0,000 tons of cane per day and use 0,000,000 gallons of water per day. ıis is an average of 6,522,000 gal- ns per day per cane factory. This es not include the water used by ›uisiana's seven sugar refineries r which we have no data. We do ıow their water usage is large. ıeir operations are not seasonal. ıey operate during the entire year. We are fortunate that sufficient ater for our cane factories and ıgar refineries is available from the ississippi River and other streams ıd from fresh water wells. How- ver, in view of the phenomenal in- ıstrial growth of South Louisiana, hich necessitates an ever increasing eed of water for industrial use, we ın envision the day when we may ›t be so fortunate as we are today. herefore, study and research is here dicated.

Also, disposal of the cane factory aste water in a manner which will void stream pollution is a problem ı some instances. We believe more esearch on the handling, treatment, ıd disposal of cane factory waste ater would be in order.

It is also germane to the purpose f this hearing to mention flood con- ol appropriations and work by the ederal Government. Such appro- riations and work are vitally im- ortant to the Louisiana sugar ıdustry. The Atchafalaya Basin loodway is an essential part of the verall flood control plan for the lississippi River and its tributaries. he Atchafalaya Basin Floodway ccepts diverted water from the Miss- sippi River and its tributaries and ıanels this water through swamp ınds to the Gulf of Mexico. It is nly through protection levees that ıis vast quantity of water is kept rom flooding and destroying ex- remely valuable lands on both sides f the floodway.

A failure of the Atchafalaya Basin Floodway to function properly would be a major catastrophe. Approximately 278,000 acres of sugar cane land could be flooded. The value of this land with improvements exceeds $83,000,000. Thirty-three sugar mills would be subject to the ravages of floods. Four sugar refineries are also located in the possible flood area.

The capital value of property in the Louisiana sugar industry which could be flooded exceeds $258,000,000. The value of products produced annually by that portion of the Louisiana sugar industry subject to flood- exceeds $60,000,000.

The foregoing estimates do not take into consideration the very substantial damage which would be suffered by persons engaged in other farm enterprises and by non-farm industries.

Water transportation is very important to the Louisiana sugar industry. Sugar cane, raw sugar, and refined and other direct consumption sugar move by water. Therefore, we are naturally interested in the maintenance and improvements of present navigable waterways and in the creation of additional navigable waterways.

On behalf of the Louisiana sugar cane farmers and processors, we desire to indicate our appreciation of this opportunity to express to the Congress of the United States, through you, our needs and suggestions in this most worthy undertaking.

*"Sugar Factory Insurance Specialists"*

**GILLIS, HULSE and COLCOCK, Inc.**

**839 Union St.** **New Orleans, La.**

**Telephone JA 2-1225**

(Continued from page 59)

headed the New Orleans sugar brokerage firm of Sam H. Livaudais and Sons, and Richard M. Murphy, who was Vice-President of Milliken and Farwell, Inc. Mr. Livaudais, who was eighty years old, died Wednesday, November 11th at Touro Informary. Mr. Murphy died Monday, November 23rd at the same hospital. He was seventy-seven years old.

The writer considers it a distinct privilege to have known both these gentlemen. Mr. Livaudais' sons, Samuel Jr., and Kearney will continue to carry on the brokerage business in New Orleans.

### Sam B. Dunbar

Another friend of ours and a friend of practically every business man in Louisiana, died during the month of November. He was Sam B. Dunbar, manager of the Louisiana Manufacturers Association. Although Mr. Dunbar was not in the sugar business, he was certainly a friend of the Louisiana sugar industry, and we chronicle his death with sorrow.

———o———

### Weekly Average Prices

The weekly average prices issued by the Louisiana Sugar Exchange since the start of the 1959-60 Louisiana Pricing Period have been as follows:

Week ending October 15, 1959
Raws 6.515, Blackstrap 9.69

Week ending October 22, 1959
Raws 6.53, Blackstrap 9.625

Week ending October 29, 1959
Raws 6.52, Blackstrap 9.675

Week ending November 5, 1959
Raws 6.52, Blackstrap 9.69

Week ending November 12, 1959
Raws 6.50, Blackstrap 9.73

Week ending November 19, 1959
Raws 6.32, Blackstrap 9.75

Week ending November 26, 1959
Raws 6.22, Blackstrap 9.75

Average thru November 26, 1959
Raws 6.4464, Blackstrap 9.7014


**Commercial Members of the AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC**

AMERICAN CYNAMID CO.
30 Rockefeller Plaza
New York, N. Y.

AMERICAN MOLASSES CO., OF LOUISIANA, INC.
400 N. Gayoso St.
New Orleans, La.

HARRY L. LAWS & CO., INC.
126 Carondelet Street
New Orleans 12, La.

THE HIBERNIA NATIONAL BANK
New Orleans, La.

LAMBORN & COMPANY, INC.
Carondelet Building
New Orleans, La.

LEBOURGEOIS BROKERAGE CO.
823 Perdido Street
New Orleans, La.

THE NATIONAL BANK OF COMMERCE
New Orleans, La.

PENICK & FORD LTD., INC.
National Bank of Commerce Bldg.
New Orleans, La.

ESSO STANDARD OIL COMPANY
(Louisiana Division)
P. O. Box 1250 New Orleans 10, La

STANDARD SUPPLY & HARDWARE CO., INC.
822 Tchoupitoulas St.
New Orleans, La.

STATE AGRICULTURAL CREDIT CORP., INC.
837 Whitney Building
New Orleans, La.

WHITNEY NATIONAL BANK
New Orleans, La.

633.61
Su35
La. State University Library
Acquisitions Dept.
Baton Rouge 3, La.
SUGAR CHEMISTRY LIBRARY

# THE SUGAR BULLETIN

38 — No. 6 DECEMBER 15, 1959

*ial Bulletin of the American Sugar Cane League of the U. S. A.*

PRINTED ON PAPER MADE FROM
LOUISIANA SUGAR CANE BAGASSE

## *In This Issue*

Up Front With The League ..... 67
**Take A Trip To Florida—The Freight Differential—The Market—Position Wanted**

In The Field With Lloyd L. Lauden ..... 68
**A Visit To Canal Point Florida and The Florida Sugar Industry**

In Washington With Joe Ferris ..... 69

Milling And Processing Characteristics of C. P. 51-21, Compared With Commercial Varieties C. P. 44-101 and N. Co. 310 ..... 70

Commercially Recoverable Sugar Determination 1959 Crop ..... 72

Sugar Market Statistics Thru December 10, 1959 ..... 73

Weekly Average Prices ..... 75

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry

THE SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Edito

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

**Issued on the 1st and 15th of each month.** **Subscription: Member 50 cents a year. Non-Members $3.00 a year.**

**Washington Office, 510 Union Trust Bldg., Washington, D. C.**
**Josiah Ferris, Manager**

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
W. F. Giles, Jeanerette, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

# UP FRONT WITH THE LEAGUE

*by A. W. Dykers*

## Take A Trip To Florida

A tour of the fabulous Florida igar industry and other points of terest in the Sunshine State has en arranged for Louisiana cane owers and processors. *If you wish go, make your reservation prompt-*

Travel will be by Greyhound bus. ne group will leave New Orleans 7 a. m. Monday, January 11 and rive back in New Orleans at 6 m. Saturday January 16.

One main purpose of the trip is observe the very efficient and ghly mechanized field and factory erations of the United States Sug- Corporation at Clewiston, Florida, here cane harvesting and process- g will be in full swing. The other incipal objective of the trip is to sit the famous Canal Point Experi- ent Station which develops cane rieties which have been the life ood of the Louisiana sugar indus- y for many years. The visit to the ation will be during the cane breed- g season. There will also be time to e a few of the other attractions in orida.

The cost of the trip is $80 per rson. This includes room accom- odations at first class hotels or otels but does not include meals.

The League is acting as liaison tween Greyhound Lines and those no wish to make the trip. *If you sh to go, send the League your eck for $80 right away before all e bus seats are sold.*

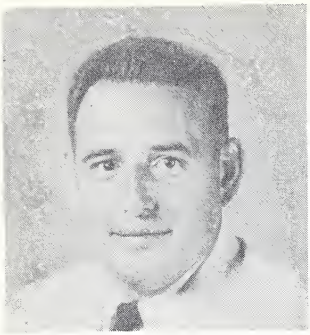
## The Freight Differential

The "freight differential". By now we are sure that every cane farmer knows about it and is probably cussing it. It jumped from 3 cents on October 1st to 10 cents on November 10th and, right now on December 10th, it is 8 cents. Last year at this time it was 5 cents and on December 10th 1957 it was 3 cents. Thanks to the 8 cent deficit, the price of raw sugar today, delivered New Orleans, is $6.12 a hundred pounds as compared to a New York quotation of $6.20 a hundred pounds.

The freight differential is, of course, of vital importance to every Louisiana cane grower, sugarcane processor, and sugar refiner. A simple explanation of why it is used by the Louisiana Sugar Exchange is that it costs less to ship sugar from Cuba to New Orleans than it does to ship sugar from Cuba to New York. The very reputable freight brokerage firm of James E. Ward & Co. says that, as very reputable freight brokerage of James E. Ward & Co. says that, as of today, it costs 8 cents a hundred pounds less to ship sugar from Cuba to New Orleans than to New York. If Cuban sugar is selling today at $6.20 a hundred pounds, delivered to a New York refiner, the same Cuban sugar can be bought by a New Orleans refiner at $6.20 *less the difference in the freight charges to deliver the sugar to New Orleans;* hence, the $6.12 New Orleans quotation.

The Executive Committee of the

(Continued on page 73)



# IN THE FIELD WITH LLOYD LAUDEN

*by Lloyd L. Lauden*

## A Visit To The Canal Point, Florida An The Florida Sugar Industry

Over the years only a few representatives of the Louisiana sugar industry have visited the U.S.D.A. Sugar Cane Breeding Station at Canal Point, Florida, and the Florida sugar industry. These visitors enjoyed the trip to such an extent that several have made a second visit.

The interest and enthusiasm expressed by these visitors encouraged the American Sugar Cane League to plan a tour of the Station and the great sugar industry of Florida for other members of the Louisiana sugar industry.

The group will travel by chartered bus, leaving New Orleans on January 11 and returning on January 16. Persons who wish to make the trip should contact the American Sugar Cane League for details.

One of the main purposes of the visit is to observe the field and factory operations of the United States Sugar Corporation at Clewiston, Florida. This operation is highly mechanized, very efficient, and is the largest sugar cane operation in the United States mainland. Cane yields are high, some fields yield as much as 100 tons per acre, with average yields per acre some years near 50 tons. The U. S. Sugars Corporation produces slightly more than 1,000,000 tons of cane per year.

Cane is cut by hand labor after having been burned while standing. Heavy cane yields and badly tangled growth have prevented the satisfactory use of mechanical harvesters. Cane is mechanically loaded with a conveyer type loader that cuts the cane into 24 inch pieces.

The cane hauling operation somewhat different from metho used here. Larger wagons with lar er tires are used. Chain slings a not used. The wagons are empti by a side dumping method. This sy tem appears very simple and high efficient.

Factory representatives will ce tainly enjoy observing the 6,500 t capacity mill as well as a comple tour through the factory. The Flo da harvest season usually starts November and ends in April.

It is important to note that t Louisiana sugar industry receives v itors from all over the world to lea details of our methods in order improve some phase of their o erations. Louisiana representativ should also visit other areas and th is an excellent opportunity.

The other special purpose for t visit to Florida is to further acquai Louisiana growers and processors the very valuable service perform by the U.S.D.A. Canal Point, Flori Sugar Cane Breeding Station. T breeding of new varieties of cane Canal Point for Louisiana has virt ally been the life blood of the Loui ana sugar industry for many yea

Growers will be interested in t large number of different variet from all over the world in the Ca Point cane collection. Of great terest will be the canes used in t crossing program to develop n varieties for Louisiana. Visitors w have an opportunity to observe t actual cane crossing techniques use as well as gathering and dryi

(Continued on page 73)

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*

The tea-pot tempests over cran-
erries and birth control have forced
igar to the back seat temporarily.

Developments in recent weeks have
erved to focus public attention on
esticides and food additives which
ntain cancer-causing chemicals.

The National Grange and the Farm
ureau Federation are still in a tizzy
er the way Health, Education and
elfare Secretary Flemming han-
ed the cranberry mess. Officials
those farm organizations claim the
overnment had known for several
ears that some cranberry crops were
ntaminated, and that Secretary
leming for personal reasons chose
break the Thanksgiving cranberry
arket with his "unwise and pre-
pitous" announcement.

U. S. Department of Agriculture
fficials also are greatly exercised
ecause Fleming gave them no notice
what he planned to do; conse-
iently they are howling for his
elp.

The present law is hazy as to which
gency; the U. S. Department of Ag-
culture or the Department of
ealth, Education and Welfare is
sponsible for law enforcement, so
ndoubtedly Congress as soon as it
mes back to town will undertake
settle the conflict. The result will
tougher penalties on farmers, as
ell as manufacturers who violate
e law.

As the law is now the Food and
rug Administration, Health, Educa-
on and Welfare, is required to dis-
prove for agricultural use, the
anufacture of cancer-causing chem-
icals. The U. S. Department of Agriculture can approve such chemicals for farm use. In the cranberry case, for example, the Food and Drug Administration ruled that aminotriazole —the weed killer used on cranberry farms — is a carcinogen, a cancer-causing chemical, but the U. S. Department of Agriculture approves its use when applied in accordance with the manufacturer's directions so as not to leave a residue on the crop.

There will be a flood of bills introduced to close this and other loopholes in the law when Congress convenes next January 4th.

The furore over birth control is the phoniest pre-campaign political issue to be raised in many years. Actually no consideration has ever been given in governmental circles for the use of foreign aid funds for birth control. There certainly was no rhyme or reason why this subject should have been brought up at this time or any other time.

After the speeches on cranberries and birth control have been made, and printed in the Congressional Record for posterity, sugar legislation will again come to the fore, but all the wisdom of Solomon will be required to solve the complicated problem of what to do about the Cuban quota; shall we continue to buy Cuban sugar and thus finance Castro and his revolutionaries, or shall we cut the quota and hasten his downfall?

---

Anyway the holiday season is here, so Merry Christmas and Happy New Year.

# MILLING AND PROCESSING CHARACTERISTICS OF C. P. 51-2 COMPARED WITH COMMERCIAL VARIETIES C. P. 44-101 AND N. CO. 310

*by W. F. Guilbeau, E. E. Coll, and L. F. Martin, Southern Regional Research Laboratory,[1] New Orleans, La.*

During the 1958 grinding season the unreleased variety C. P. 51-21 was milled and processed in the pilot plant of the Audubon Sugar Factory, for comparison with two commercial varieties, the standard C. P. 44-101, now 50.91% of the crop, and N. Co. 310 (11.16%) of the crop (1958 U. S. D. A. Crop Research Service). The latter may eventually replace C. P. 44-101 as the standard used for comparison.

Milling characteristics were obtained by Louisiana State University's Department of Chemical Engineering, incidental to an investigation of improved procedures for sampling sugarcane under a research contract with the Agricultural Marketing Service of U. S. D. A.

Due to a limited supply of variety C. P. 51-21, only 4 experiments were made. Two samples of stubble were furnished by Milliken and Farwell, Inc., Smithfield Plantation, in the Mississippi River area, and two samples of plant cane by Duhe and Bourgeois Sugar Company from the Hope Plantation in the Bayou Teche area. The commercial varieties C. P. 44-101 and N. Co. 310 were obtained from St. Gabriel Plantation. Only the average results are given in the table; data on the individual experiments have been reported previously (1,2).

With only one season's work on C. P. 51-21, and 4 tests instead of the usual 8 per season, no definite conclusion will be drawn. The results obtained on milling and processing the varieties will be combined in this report.

The table contains only the most pertinent data obtained during mi ing and processing, but there is su ficient information for compari the quality of the unreleased varie with the commercial ones, C. P. 4 101 and N. Co. 310.

Variety C. P. 51-21 had a mu higher fiber content than either the commercial varietes and the ra of cane ground per hour at t Audubon Sugar Mill was 14.86 tor compared to 17.36 and 17.20 for C. 44-101 and N. Co. 310, respectivel A variety with high fiber conte such as C. P. 51-21 will decrease t grinding rate considerably, and i crease the length of the grindi season by 17% over C. P. 44-10 based on cane milled per hour. T lower sucrose extraction is partly d to the high fiber in the cane.

Mud discharge of C. P. 51-21 fro the clarifier is about the same N. Co. 310, but lower than standa variety C. P. 44-101. Clarity of t juice is much poorer than the co mercial varieties. Low mud dischar from the clarifier is usually a go characteristic, but consideration mu be given at the same time to t quality of the juice. The very l clarity or high turbidity and col approximately 300% greater th C. P. 44-101 and N. Co. 310, could attributed to poor settling of preci tated impurities, resulting in the l mud volume. According to Fort a Smith (3), the materials causing tu bidity in clarified juices such starch, lipids, protein, and sili have been found be to present the raw sugar crystals after affi tion. These impurities are the or most difficult to eliminate in the fining process and they are son times found in small quantities in t refined sugar crystals. It is of gre importance to keep these impurit

[1] One of the laboratories of the Southern Utilization Research and Development Division, Agricultural Research Service, U. S. Department of Agriculture.

**Comparison of Variety C. P. 51-21 with Varieties C. P. 44-101 and N. Co. 310; Average Results of Experiments for 1958**

| | Variety | | | Comparative Rating | |
|---|---|---|---|---|---|
| | CP 51-21 | CP 44-101 | N.Co. 310 | CP 51-21 with CP 44-101 as 100% | CP 51-21 with N.Co. 310 as 100% |
| **garcane** | | | | | |
| Sucrose % | 12.06 | 10.30 | 12.10 | 117 | 100 |
| Fiber % | 17.54 | 13.06 | 13.84 | 134 | 127 |
| Juice Purity | 78.8 | 74.2 | 80.9 | 106 | 97 |
| **efecated Juice** | | | | | |
| Purity | 80.8 | 75.4 | 82.0 | 107 | 99 |
| Clarity | 16 | 45 | 42 | 36 | 38 |
| **larifier Discharge** | | | | | |
| Mud #/T. cane | 143 | 150 | 141 | 105 | 98 |
| Dry solids % Wet Mud | 6.74 | 6.71 | 6.91 | 100 | 98 |
| **otal Available 96°Sugar, #/T. Cane** | 171.35 | 150.30 | 184.08 | 114 | 93 |
| **ate of Grinding** | | | | | |
| Tons cane per hr. | 14.86 | 17.36 | 17.20 | 86 | 86 |
| Tons fiber per hr. | 2.60 | 2.28 | 2.38 | 118 | 109 |
| **roduct Output (Sugar)** | | | | | |
| Lb. per hour | 25.46 | 26.09 | 31.66 | 97.59 | 80.41 |
| **ill Power** | | | | | |
| KWH per T. cane | 5.26 | 5.80 | 5.36 | 90 | 98 |
| KWH per T. fiber | 30.04 | 43.44 | 38.64 | 69 | 78 |
| **ucrose Extraction** | 86.49 | 88.85 | 88.95 | 97.34 | 97.23 |
| **ime (Hrs.) Required to mill 1000 T. cane** | 67.3 | 57.6 | 58.1 | 117 | 116 |

a minimum in the clarified juices. The higher calculated total available 96° sugar of C. P. 51-21 may be educed considerably in practice due the larger amount of non-sugars, th proteins and starch in the clarified juice, which have pronounced ffects on the amount of sugar crystllizing from the sirup and on the ystallization rate(4). These imurities could result in increased boilg time and required larger pan apacity. They tend to increase mosses viscosity, resulting in poorer ntrifugation and reduction of sugr yield.

It is vital to the future of the sugar ndustry that canes of high sucrose nd low fiber content be selected—anes that will give clear, light-colred clarified juice with minimum rbidity and low discharge of mud om the clarifier.

Data showing the comparative retionship of C. P. 51-21 to the standard variety C. P. 44-101 and to N. Co. 310, as 100, with respect to the characteristics listed, are given in the table.

We are indebted to Mr. Carl W. Stewart, Superintendent, Audubon Sugar Factory, Louisiana State University, for milling data on all of the canes discussed in this article.

(1) Guilbeau, W. F., Coll, R. E., and Martin, L. F. "Processing of New Commercial and Unreleased Sugarcanes — Results of Clarification Experiments During the 1958 Season." Sugar Bull. 37(21), 274-283 (Aug. 1, 1959).

(2) Stewart, Carl W. "Evaluation of Sugarcane Varieties, 1958 Grinding Season." Available at Audubon Sugar Factory, Dept. of Chemical Engineering, Louisiana State University (to be incorporated in an Engineering Experiment Station Bulletin).

(3) Fort, C. A. and Smith, B. A. "Studies of the Chemical Composition of Materials Causing Turbidity in Clarified Sugarcane Juices." Sugar J. 17(6), 18-21, 32 (Nov. 1954).

(4) Honig, P. (editor). "Principles of Sugar Technology," Vol II, Chap 5, 213-218. Elsevier Publishing Co., New York, 1959.

# COMMERCIALLY RECOVERABLE SUGAR DETERMINATION 833.6 REVISED FOR LOUISIANA SUGARCANE, 1959 CROP

Hundredweights of Sugar, Raw Value, Commercially Recoverable Per Ton of Sugarcane for Percentages of Sucrose in Normal Juice from 8.0% to 18.0%, Inclusive

| % Sucrose Normal Juice | Cwt. Sugar Per Ton Cane | % Sucrose Normal Juice | Cwt. Sugar Per Ton Cane | % Sucrose Normal Juice | Cwt. Sugar Per Ton Cane |
|---|---|---|---|---|---|
| 8.0 | .939 | 11.5 | 1.539 | 15.0 | 2.147 |
| 8.1 | .956 | 11.6 | 1.557 | 15.1 | 2.164 |
| 8.2 | .973 | 11.7 | 1.574 | 15.2 | 2.182 |
| 8.3 | .990 | 11.8 | 1.591 | 15.3 | 2.199 |
| 8.4 | 1.007 | 11.9 | 1.608 | 15.4 | 2.217 |
| 8.5 | 1.023 | 12.0 | 1.625 | 15.5 | 2.234 |
| 8.6 | 1.040 | 12.1 | 1.642 | 15.6 | 2.252 |
| 8.7 | 1.057 | 12.2 | 1.659 | 15.7 | 2.269 |
| 8.8 | 1.074 | 12.3 | 1.677 | 15.8 | 2.287 |
| 8.9 | 1.091 | 12.4 | 1.694 | 15.9 | 2.304 |
| 9.0 | 1.108 | 12.5 | 1.711 | 16.0 | 2.322 |
| 9.1 | 1.125 | 12.6 | 1.728 | 16.1 | 2.339 |
| 9.2 | 1.142 | 12.7 | 1.745 | 16.2 | 2.357 |
| 9.3 | 1.160 | 12.8 | 1.763 | 16.3 | 2.374 |
| 9.4 | 1.177 | 12.9 | 1.780 | 16.4 | 2.392 |
| 9.5 | 1.194 | 13.0 | 1.797 | 16.5 | 2.409 |
| 9.6 | 1.211 | 13.1 | 1.814 | 16.6 | 2.426 |
| 9.7 | 1.228 | 13.2 | 1.832 | 16.7 | 2.444 |
| 9.8 | 1.246 | 13.3 | 1.849 | 16.8 | 2.461 |
| 9.9 | 1.263 | 13.4 | 1.867 | 16.9 | 2.479 |
| 10.0 | 1.280 | 13.5 | 1.884 | 17.0 | 2.496 |
| 10.1 | 1.297 | 13.6 | 1.902 | 17.1 | 2.514 |
| 10.2 | 1.315 | 13.7 | 1.919 | 17.2 | 2.531 |
| 10.3 | 1.332 | 13.8 | 1.937 | 17.3 | 2.549 |
| 10.4 | 1.350 | 13.9 | 1.954 | 17.4 | 2.566 |
| 10.5 | 1.367 | 14.0 | 1.972 | 17.5 | 2.584 |
| 10.6 | 1.384 | 14.1 | 1.989 | 17.6 | 2.602 |
| 10.7 | 1.402 | 14.2 | 2.007 | 17.7 | 2.619 |
| 10.8 | 1.419 | 14.3 | 2.024 | 17.8 | 2.637 |
| 10.9 | 1.437 | 14.4 | 2.042 | 17.9 | 2.654 |
| 11.0 | 1.454 | 14.5 | 2.059 | 18.0 | 2.672 |
| 11.1 | 1.471 | 14.6 | 2.077 | | |
| 11.2 | 1.488 | 14.7 | 2.094 | | |
| 11.3 | 1.505 | 14.8 | 2.112 | | |
| 11.4 | 1.522 | 14.9 | 2.129 | | |

# SUGAR MARKET STATISTICS THROUGH DEC. 10, 1959

| | Today | 1 Month Ago | 1 Year Ago |
|---|---|---|---|
| QUOTA RAWS DELIVERED NEW YORK | 6.20 | 6.57 | 6.48 |
| QUOTA RAWS DELIVERED NEW ORLEANS | 6.12 | 6.52 | 6.43 |
| RESIDUAL SPOT RAWS (In Cuba) | 3.00 | 2.98 | 3.72 |

**SUGAR FUTURES No. 6**
**(Closing Bid Prices)**

| | Jan. | Mch. | May |
|---|---|---|---|
| Today | 5.72 | 5.64 | 5.69 |
| Month Ago | 5.74 | 5.60 | 5.67 |
| Year Ago | None | 5.91 | 5.89 |

**OFFSHORE RECEIPTS AT NEW ORLEANS**
**(Long Tons, 2,240 lbs.)**

| | Jan. 1 Dec. 10 1959 | Jan. 1 Dec. 10 1958 |
|---|---|---|
| American | 397,551 | 426,949 |
| National (Godchaux) | 165,508 | 168,223 |
| Colonial | 150,942 | 148,323 |
| Henderson | 116,679 | 107,965 |
| Southdown | 64,787 | 42,964 |
| South Coast | 70,730 | 67,183 |
| Supreme | 126,788 | 118,556 |
| Totals | 1,092,985 | 1,080,163 |

## N THE FIELD

(Continued from page 68)

true sugar cane seed.

In addition to what will be seen nd learned while in Florida, dele-ites will have an opportunity to scuss mutual problems among them-lves while on this six day trip gether.

—o—

## P FRONT

(Continued from page 67)

merican Sugar Cane League has in-ructed its Raw Sugar Committee make a study of the freight differ-ntial.

### The Market

The Detroit, Michigan sugar bro-erage firm of W. H. Edgar & Sons ave explained the present raw sugar arket situation in their report to ie trade dated December 11th and e take the liberty of quoting the llowing paragraph from the report.

"The market tended to be some-what easier, with little apparent interest being indicated on the part of refiners. Over-quota offerings are presently held at the last paid price of 6.23 duty paid. The situation on in-quota sugars appears to be more or less nominal due to the rather small balance remaining unsold. Some apprehension developed during the week when it was reported that the Southern and Gulf Steamship operators were not inclined to go along with the proposed contract agreement negotiated with the Longshoremen in the North Atlantic ports. The fear has been that even though an agreement exists in the North Hatteras area, these ports might elect to go out in sympathy should the Southern operators fail to arrive at a contract prior to the expiration of the Taft-Hartley injunction on December 28th. Although there have been no subsequent developments which would alter the earlier apprehensions, it is now generally believed that an agreement will eventually be reached by all ports without resorting to a strike. As a result of the latter belief, little interest is being displayed on the

(Continued on next page)

part of buyers. Sellers, meanwhile, show no inclination to press the market. Business reported has been very light, with the spot now quoted at 6.20 duty paid, a decline of 5 points on the week. There has recently been quite a bit of attention focused on the new Sugar Legislation which is soon to come before Congress. In view of Cuba's actions, which in some opinions are considered detrimental to the United States' interests, there have been many corrective measures proposed favoring areas other than Cuba. From press reports, one such proposal would incorporate in a new Sugar Bill that 200,000 tons of Puerto Rico's annual average deficit be taken from Cuba's United States quota and transferred to domestic producers. Cuba would be compensated by receiving all of the Puerto Rican deficit, whether it be more or less than the 200,000 tons. Puerto Rico would always have the privilege of fulfilling her quota, in which case it would be deducted from Cuba. However, it is believed that Washington is not too enthusiastic abc writing anything into the new Su ar Legislation that might appe as reprisals to Cuba's actions u der their newly invoked agrari program."

### Position Wanted

The following paragraphs ar taken from a letter recently receiv by the League's Agronomist, Llo L. Lauden from Clay M. Samson, post-graduate student who would li a position with the Louisiana sug industry after he receives his Ma ters' Degree from Louisiana Sta University in January.

"I am presently enrolled in a sug cane production course here at t university (L. S. U.). It is bei taught by Dr. Rusell L. Miller, w referred me to you as a possib source of information concerning e ployment in some phase of sugar ca production.

I received my B.S. degree in Voc tional Agricultural Education fr Louisiana State University in Augu 1958, and am a candidate for an M degree in Agricultural Extension E ucation in January, 1960.

**Mr. Maurice Eliser, of Waterford Plantation, stands in a field of lodged cane. Believ it or not—this cane was harvested by a conventional harvester with a pick-u attachment.**

Having originated from the sugar ne area, West Baton Rouge Parish, am interested in possible employ- ent in the field of sugar cane pro- ction."

Mr. Samson's address is 132 East ate Street, Baton Rouge, La.

—o—

## Weekly Average Prices

The weekly average prices issued the Louisiana Sugar Exchange nce the start of the 1959-60 Louisi- a Pricing Period have been as fol- ws:

Week ending October 15, 1959
Raws 6.515, Blackstrap 9.69

Week ending October 22, 1959
Raws 6.53, Blackstrap 9.625

Week ending October 29, 1959
Raws 6.52, Blackstrap 9.675

Week ending November 5, 1959
Raws 6.52, Blackstrap 9.69

Week ending November 12, 1959
Raws 6.50, Blackstrap 9.73

Week ending November 19, 1959
Raws 6.32, Blackstrap 9.75

Week ending November 26, 1959
Raws 6.22, Blackstrap 9.75

Average thru November 26, 1959
Raws 6.4464, Blackstrap 9.7014

Week ending December 3, 1959
Raws 6.25, Blackstrap 9.75

Week ending December 9, 1959
Raws 6.14, Blackstrap 9.70

Average thru December 9, 1959
Raws 6.3905, Blackstrap 9.706

Averages at this time last year
Raws 6.360, Blackstrap 12.505


*"Sugar Factory Insurance Specialists"*

**GILLIS, HULSE and COLCOCK, Inc.**

339 Union St. New Orleans, La.

Telephone JA 2-1225



**Commercial Members of the AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC.**

AMERICAN CYNAMID CO.
30 Rockefeller Plaza
New York, N. Y.

AMERICAN MOLASSES CO., OF LOUISIANA, INC.
400 N. Gayoso St.
New Orleans, La.

HARRY L. LAWS & CO., INC.
126 Carondelet Street
New Orleans 12, La.

THE HIBERNIA NATIONAL BANK
New Orleans, La.

LAMBORN & COMPANY, INC.
Carondelet Building
New Orleans, La.

LEBOURGEOIS BROKERAGE CO.
823 Perdido Street
New Orleans, La.

THE NATIONAL BANK OF COMMERCE
New Orleans, La.

PENICK & FORD LTD., INC.
National Bank of Commerce Bldg.
New Orleans, La.

ESSO STANDARD OIL COMPANY
(Louisiana Division)
P. O. Box 1250 New Orleans 10, La.

STANDARD SUPPLY & HARDWARE CO., INC.
822 Tchoupitoulas St.
New Orleans, La.

STATE AGRICULTURAL CREDIT CORP., INC.
837 Whitney Building
New Orleans, La.

WHITNEY NATIONAL BANK
New Orleans, La.

# 3¾% interest

# on New U.S. Savings Bonds

# now in effect

*and the Bonds you already own are better than ever, too!*

Now U.S. Savings Bonds are a better buy than ever in three important ways:

- ***All Series E and H Bonds bought since June 1, 1959, now earn 3¾% interest when held to maturity.***
- ***Older Bonds will also pay more—an extra ½%, from June 1 on, if you hold them to maturity.***
- ***All Series E Bonds, old or new, now carry an automatic extension privilege; they'll keep paying liberal interest for 10 years beyond maturity.***

Three big new *dollar* benefits that make it smart to buy new Bonds—and hang on to the ones you have!

**40 million Americans now own Bonds**

But a good return isn't the only reason so many people buy Bonds. They've discovered that there's no easier, safer, more *American* way to save.

You can buy Bonds automatically, through the Payroll Savings Plan where you work; you can buy them at your bank; your youngsters can even buy them at school, through the School Savings Plan for U.S. Savings Stamps.

The U.S. Government guarantees that the cash value of your Bonds cannot drop; it can only grow. And if your Bonds should be lost, stolen, or destroyed, the Treasury will replace them free.

Finally, every Bond you buy does a big job for America. Because today peace costs money—money for military strength and for science; and money saved by individuals to keep our economy sound.

Your Bonds help provide this money—help America keep the peace. So, to build a brighter future for yourself and your family—and to *protect* it—save with U.S. Savings Bonds. They're better than ever.

HELP STRENGTHEN AMERICA'S PEACE POWER

# SAVE WITH U.S. SAVINGS BONDS

*The U.S. Government does not pay for this advertising. The Treasury Department thanks The Advertising Council and this magazine for their patriotic donation.*

533.61
Su35

INDEX FOR VOLUMES 36 AND 37

La. State University Libra
Acquisitions Dept.
Baton Rouge 3, La.
CHEMISTRY LIBRARY

THE SUGAR BULLETIN

38—No. 7 JANUARY 1, 1960

*ial Bulletin of the American Sugar Cane League of the U. S. A.*

PRINTED ON PAPER MADE FROM
LOUISIANA SUGAR CANE BAGASSE

## *In This Issue*

Up Front With The League ..... 79
**The Old Mule—Gerard Heads "State"**

In The Field With Lloyd L. Lauden ..... 80
**Planning the 1960 Cane Crop**

In Washington With Josiah Ferris ..... 81
**The Cuban Situation**

Index To Volumes 36 and 37 ..... 82

Standing Committees Of The American Sugar Cane League ..... 88

Sugar Quotas Totaling 9,400,000 Tons Announced For 1960 ..... 91

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry

THE SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Edit

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

Issued on the 1st and 15th of each month. Subscription: Member 50 cents a year. Non-Members $3.00 a year.

Washington Office, 510 Union Trust Bldg., Washington, D. C.
Josiah Ferris, Manager

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
W. F. Giles, Jeanerette, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

# UP FRONT WITH THE LEAGUE

*by A. W. Dykers*

## The Ole Mule

It's practically New Year's Eve, d everyone is supposed to be happy d we have tried very hard to over- ok it, but somehow-or-other we just n't shake the injustice of it all. e refer, of course, to the 9,400,000 n load that the folks in Washington ve dumped on our already beat up d Mule. Here our old critter has en struggling under the burden of ns and tons of over-quota sugar, a of which wasn't needed, and now mes this avalanche. Just for the cord, we would like to point out at as of the close of business De- mber 29, 1959 there were still ,483 tons of sugar, raw value, in e Cuban quota balance for *1959,* cording to Mr. Donald M. Swartz, ad of the Commodity Stabilization rvice. Also, just for the record, e would like to point out that on ptember 28th 1959 which was three onths, or ¼ of a year ago, the re- ning of *1960* quota sugars was au- orized by the Sugar Division of e U.S.D.A.

Officials of the U.S.D.A. said at at time that this action was taken o make needed supplies available to ast Coast refiners", but our guess that the action was an attempt to eak the market which the U.S.D.A. inted out in the news release had ncreased to 6.55 cents per pound 1 September 24th".

But, to get back to the Ole Mule. here will be no celebrating in Mule- lle tonight. The Old Mule is much o tired to make whoopee.

## Gerard Heads "State"

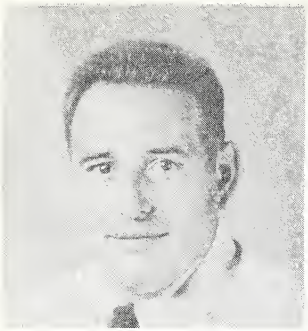
Lester C. Gerard, who has helped ide the affairs of the State Agri- ltural Credit Corporation, Inc., nce it was organized in 1926, was ected President of that sugar cane rm credit organization by the oard of Directors at a meeting held New Orleans December 17th. He succeeds the late R. M. Murphy who headed the Corporation from December 18, 1930 until his death on November 23, 1959. F. Evans Farwell, another gentleman who is well known to all of us in the Louisiana sugar business, was elected 1st Vice-President at the December 17th meeting.

Other officers of the State Agricultural Credit Corporation, Inc. are J. J. Munson, 2nd Vice-President, Mrs. Oralee Schulz, Secretary-Treasurer and E. D. Gelzer, Assistant Secretary-Treasurer.

The State Agricultural Credit Corporation is a crop financing organization. It came into being because cane diseases and cane pests had reduced the Louisiana cane crop from 5,033,000 tons in 1921 to 1,088,000 tons in 1926. With this dismal record, the usual sources of private financing enjoyed during better times were no longer available and "State" was organized to finance the crop through the Federal Intermediate Credit Bank.

In 1927 the newly introduced P.O.J. canes pointed the way towards the revival of sugar production in Louisiana, and subscriptions to the State Agricultural Credit Corporation from growers, banks, railroads, and firms doing business in the Louisiana sugar district raised the capital stock of the corporation to $450,000. Ten years later the Louisiana cane farmers harvested over 5,615,000 tons of cane and the Industry was back on its feet again.

During the 33 years in which it has successfully operated the State Agricultural Credit Corporation has loaned millions of dollars to Louisiana cane farmers for supplies, equipment and farming operations. We are confident that under the able guidance of Mr. Gerard it will continue to be a major factor in the business of raising sugar cane in Louisiana.



# IN THE FIELD WITH LLOYD LAUDE

*by Lloyd L. Lauden*

## Planning The 1960 Cane Crop

It is now time to begin planning ahead for the 1960 cane crop. Much can be done now to make the work of the future a little easier and less costly.

To begin with, all harvesting equipment can be repaired and put back into good working condition. Harvester and loader operators now know what has to be repaired on this equipment. Some of this will be forgottten if repairs are delayed.

A careful inspection of all cultivation tools may uncover the need for many small repair jobs that will save time and labor during the very busy cultivating season. With the constant threat of rains during the cultivation season, it is always wise to have tools in perfect working condition so that a complete round of cultivation can be done well while the sun shines. The old adage, "a stich in time saves nine" certainly applies to cane cultivating tools and it usually results in money being saved.

Everyone will remember that the 1959 cane crop was a grassy one. There is no doubt that this condition hurt yields. Growers will have to give more attention to weed control this year because of the large number of weed seed set in the fields last year. Begin planning a weed control program now. Order chemicals early. Get spray rigs in shape and read over the weed control recommendations. Talk to the County Agent about we control. Get the latest informati and do a better job.

Growers who did not attempt control the borer last year shou talk to other growers who did cont the borer. Growers who used Endı last year are the best salesmen. Che with them and learn how to cont this pest which takes many tons cane each year.

In spite of a fairly good planti season last year and the promise good plant cane stands this ye growers should always keep a sm amount of the best old stubble just case a few fields of plant cane f to come out. This is always good surance and the old stubble can ways be broken out a little late.

It is well to point out that it is r just one single operation that det mines whether a grower's crop w be a good one or a bad one. It is combination of many or all of t operations put together. All the lit things, if done correctly, add up better yields. Growers who pay sp cial attention to each phase of th operation are generally the hi yield farmers.

Watch for the latest recommen tion put out by L. S. U. and the U. D. A. Attend the meetings called the County Agents throughout t year. Learn how to do a better job farming on the 1960 cane crop.

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*

## The Cuban Situation

The Sugar Act has now become n instrument of political compul-on" according to Dr. Paul Sepero nilla, Minister of Commerce of the ban Revolutionary Government. In s address to the Lions Club of avana, Dr. Bonilla called the United ates quota system "concealed inter-ntion".

"If Cuba follows this or that pol-, we cannot prevent Congress om reducing the Cuban quota, say aathers, Ellender, Long, and Mans-ld, the rice growers of Louisiana, e grain millers of Buffalo, the lard oducers of Chicago, the magazines me, Life and Fortune. These ele-nts, who do not make up the ma-rity of the North American people, w feel that the Cuban sugar quota ould have the same role as the att Amendment did in the past, a eans of interfering in the internal fairs of Cuba."

Complaining about reductions in e Cuban quota made in previous nendments to the Sugar Act, Dr. nilla advocates including sugar in commercial treaty "so that the only unterpart which Cuba has in its ade with the United States no long-remains a unilateral question, nich can be settled by only one of e parties, but becomes a bilateral estion which cannot be modified only one of the parties". Dr. Bo-la's suggestion may be better than thinks because it would permit us buy Cuban sugar at the world arket price and thus end the dole approximately two cents a pound above the world market price which we pay Cuba to stimulate her waning economy, and which largely goes now to finance Castro and his revolutionaries.

In mentioning the Platt Amendment, Dr. Bonilla has brought up a subject which is being discussed more and more frequently as time goes on and the United States is subjected to more and greater insults by Prime Minister Castro and his associates.

If the United States had not abrogated the Platt Amendment, Prime Minister Castro and his fellow revolutionaries would not be the recognized government of Cuba, assuming of course, that we have in our State Department now individuals with the same amount of intestinal fortitude as those who occupied similar positions when the Platt Amendment was in full force and effect.

Some of the younger Members of Congress advocate the enactment of a modern version of the Platt Amendment and a return of the Teddy Roosevelt type of diplomacy. They say it would be much cheaper for the tax payer and considerably more effective than trying to buy friendship in Cuba and Latin America with dollars. They point out that despite the expenditure of billions and billions of dollars to help the economies of Cuba and other countries in the southern part of this hemisphere, U. S. prestige is at its lowest point since the Platt Amendment was abrogated.

And speaking of our recognition of Castro's government, the Senate For-

(Continued on page 92)

# INDEX---VOLUMES 36 AND 37---ISSUES
# October 1, 1958 Through September 15, 1959

## Up Front With The League

### VOLUME No. 36


Annual Meeting Held — Elections — High Yield Award Winners — Stephen C. Munson
Malcolm Duhe Heads Contact Committee—Pricing Period, Quotation Committees —Pricing — Rules Governing Sales of Louisiana Raw Sugar — Committee Rules
To Honor Congressional Delegation—Do Not Overload Cane Trucks—Proportionate Shares—Prices—N.Y.C. & S. Exchange In New Home—Baughman Honored
A Dilemma—New Regulation—Sweetened Cream—Imperial Expands
Tom Allen To Sterling—Deserve Thanks—"History In The Making"
It Could Be Fatal—Freight Rates—Quotas and Deficits
Price Control — President Ill — Southdown Moves — Freight Rates — Schedule Farm Forum—Tax Refund
Hawaii In May—Mr. Myers Explains
The Weather—John M. Caffery
The Old Mule—Hearing Held—Pricing Period Ends
Technologists Elect—Contact Committee To Meet
Exchange Elects—Committee Chairman Report
One Year Ago—Freight Rates—Acreage Allotments—Mules
Deficits—Wax From Sugar Cane—Sugar-Charcoal Steaks
Acreage Allotments—An Ill Wind
The Old Mule—Hawaiian Strike Settled
Price Control—Wage, Price Hearing July 24th—Outstanding Farmer
The Wage-Price Hearing—Horace Wilkinson Appointed
Proportionate Shares — Annual Meeting September 25th — Meeting — Festival Starts September 26th—Ralph Brown Promoted


### VOLUME No. 37


Meeting Held—Prices—Sugar Exchange Reports
Predictions—Season Begins—Harry M. Row—Soil And Water Research—Myrtle Grove First—Raw Sugar Rules
A Deal—Where Did He Get It?—Molasses Imports—Lift Marketing Restrictions
Decisions—U.S.D.A. Harvester—Weekly Average Prices—Help Wanted
Season's Greetings—Winners—M. L. Marquette—Doyle Promoted
Wonders—Louis Caillouet Dies—Farm Forum To Meet
A Letter From Mr. Myers—Short Course—Keller Elected—Marketing Allotment Hearing Set—World Beet Sugar Production—Plan Bulk Futures Contract
Marketing Hearing—Enterprise Burns—Proportionate Shares
Graugnard Heads The Exchange—Farwell Reports—Enterprise To Rebuild—Agribusiness—Technologists To Meet—Molasses Imports
Very Depressing—Technologists To Meet—Now He Tells Us!
The Old Mule—Off To See The Wizard—Acreage Hearing—Sugar, 2000
Acreage Hearing—F. Elliott Jones—Growers To Elect
Acreage Restrictions Lifted—Cuban Agrarian Reform—Meet June 4th—Plant Physiologist—Leon J. Landry
The Old Mule—Growers Elect—Ernest Burguieres Dies—Promotions
Tax Exemptions—Hi Sugar—Position Wanted
Annual Meeting—High Yield Awards—King Savoie


## In The Field With Lloyd L. Lauden

### VOLUME No. 36


Variety Talk
Fresh Cane Pays Off—Plant Properly
Malcolm Duhe Appointed Chairman Of The Contact Committee Of The American Sugar Cane League
Sucrose and Trash Conditions
Mud and Trash
Condition Of The Crop
A New Crop On The Way
Florida Visit
Endrine To Control The Sugarcane Borer

Page
A Small Cane Harvester ..... 127
Two Important Sugar Cane Meetings For March ..... 136
What Can The 1958 Crop Be? ..... 148
Views, Opinions And Facts ..... 160
A Later Look At The Crop ..... 176
Expanded Cane Breeding Program ..... 188
Heat-Treated Seed Cane ..... 201
Technologists Meeting June 10th In Thibodaux ..... 213
Houma Contact Committee Meeting June 26th ..... 229
A Look At The Crop Now ..... 239
Louisiana Gets A New Cane ..... 256
Cane Planting Time Here ..... 268
Allocation Of C.P. 52-68 ..... 311
Distribution Of C.P. 52-68 ..... 336

**VOLUME No. 37**

High Yield Award Winners ..... 4
Endrin To Control The Borer ..... 16
Growers Should Deliver Clean Cane ..... 28
Cane Breeding ..... 60
Interest In New Harvesting Equipment ..... 72
Off Season Activities ..... 84
League Requests Increase Proportionate Shares For 1959 ..... 100
Get Most From Tires ..... 111
P. J. deGravelles Retires—Field Work Begins—Mosaic Disease ..... 120
Cane Stands Look Good ..... 132
Contact Committee Spring Meeting March 24th ..... 140
31,000 More Acres In Cane—League Against Acreage Restrictions ..... 152
Phosphate Fertilizer ..... 164
Check Cane Fields For Mosaic Disease ..... 177
A Report From Hawaii ..... 189
Come To The Houma Contact Meeting Tuesday, June 23 ..... 212
Prospects For Crop This Year (?) ..... 227
Planting Time ..... 271
St. Mary Parish Resolution On Mosaic Disease ..... 287
Cultivation Questions ..... 320
Variety Selection ..... 332

## In Washington With Joe Ferris

**VOLUME No. 36**

1957 Marketing Allotments Revised—Minimum Wage Rates Announced—Annual U. S. Beet Sugar Meeting—Under Secretary Of Agriculture Morse Praises Sugar Act ..... 5
Domestic Sugar Quota Cut—Acreage Allotment For 1958 Mainland Sugarcane—Florida Prospects—Cubans Visit ..... 21
Washington's Loss, Houma's Gain—Hearing On 1958 Sugar Requirements—Senator Wallace F. Bennett At The Sugar Club Of New York ..... 37
1958 Quota Hearing—International Sugar Council To Meet In London—Report On Trip To Vietnam ..... 53
Hearing On Sugar Requirements ..... 65
1957 Quotas Revised—Allen Goes To Work—New Officers of International Sugar Council ..... 73
1958 Quotas—Florida Crop Damaged—Happy New Year ..... 84
Farm Legislative Program — Executive Director of International Sugar Council In Washington ..... 101
Mainland Marketing Allotment Hearing—No Labor Legislation—Most Successful Agricultural Program, Sugar ..... 113
Tom Succeeds Tom—Sugar Industry Gets Another Good Man—All Florida Cane Frozen ..... 128
Florida Harvest Continues Three Months After Freeze—Research and Marketing Committee Meet In Puerto Rico ..... 137
The Recession ..... 149
Proportionate Share Hearing—Changes In Sugar Marketing Regulations—Supreme Court Decisions ..... 161
Payments To Growers Discussed By Ed Willis ..... 177
Promotions—Appropriations ..... 189
Research—Miss Reilly Honored ..... 202
Deficits ..... 214

Pag
Champions Of Domestic Sugar Industry ..... 23
Harry Vaughn Heads U. S. Sugar Corpn.—Barge Cuban Sugar To Michigan—Government and Agriculture ..... 25
The Rush To Adjourn ..... 26
Congress Adjourns—The United Nations—Sugar Conference ..... 31
Shields Heads Beet Sugar Association—Sugar Research ..... 33

**VOLUME No. 37**

International Sugar Conference .....
Rebels Active In Cuba—Judge Rules Against Government ..... 1
What Next?—Sugar Research ..... 2
Myers Lowers The Boom ..... 4
The Consumption Estimate Hearing ..... 6
Mill Marketing Allotments Not Needed—Cuban Rebels Delay Harvest ..... 7
Cooley Talks About Sugar ..... 8
Ellender Introduces Bill To Extend The Sugar Act—Fighting Stops In Cuba ..... 10
Cuban Production Fixed At 5,800,000 Tons—47 Senators Sponsor Ellender Bill—USDA Issues Sugar Production Study ..... 11
Production Problems Slow Cuban Production—Cut In Domestic Quota Unlikely.... 12
World Quotas Cut—Ellender And Castro ..... 13
Okeelanta Buys Fellsmere—International Sugar Council Meets—Cuba Has Labor Troubles ..... 14
Ernest W. Green Presented Dyer Memorial Award—Sugar Legislation ..... 15
The Cuban Situation ..... 16
Castro Visits Washington ..... 17
U. S. Sugar Corpn. Finishes Season—Philippine Bid For Larger Quota ..... 19
Acreage Restrictions Lifted—Sugar Legislation Delayed ..... 20
Ellender Urges Passage Of Sugar Legislation—State Department Turns Down Castro Offer—Smathers Suggests Change In Sugar Act ..... 21
How Long For Castro? ..... 22
Sugar Research Foundation Active—U. S. Department of Justice Investigates Marketing Of Sugar ..... 25
Hearing Scheduled On Migrant Workers—Congress Tries For September 15th Adjournment ..... 32
Congress About To Adjourn—USDA Issues Food Year Book ..... 33

## Awards

**VOLUME No. 36**

Pictures Of Recipients Of High Yield Awards .....192, 193, 206, 222, 233, 23

**VOLUME No. 37**

Pictures of Recipients Of High Yield Awards ..... 3

## Bagasse

Talk By Gilbert J. Durbin At Conference On Industrial Use Of Sugar Cane Bagasse ..... 20

## Cane Borer

**VOLUME No. 37**

Recommendations For Controlling Sugarcane Borer ..... 12
Injury To Sugarcane By The Sugarcane Borer In Louisiana In 1957 ..... 17
Borers Surviving The Winter And Prospects For 1958 Infestation In Louisiana.... 17

**VOLUME No. 37**

Recent Attempts To Establish Sugarcane Borer Parasites In Louisiana ..... 6
Sugarcane Borer Infestation And Loss In Louisiana ..... 15
Recommendations For Controlling The Sugarcane Borer And Other Pests In Louisiana—1959 ..... 16
Endrin For Sugarcane Borer Control, A Look Into The Future ..... 21
Long Term Effects of Heptachlor and Endrin On Borer Population ..... 32

## Cane Varieties

**VOLUME No. 36**

Release of C.P. 52-68 ..... 25
Locations of C.P. 52-68 ..... 25
Application For Purchase of C.P. 52-68 ..... 26
Results of Sugarcane Variety Tests In Louisiana During 1957 ..... 27

Page
The Louisiana Sugarcane Variety Census For 1958 ..... 298
Outfield Sugar Cane Variety Trials ..... 313
1958 Sugar Cane Variety Recommendations ..... 331

VOLUME No. 37

1959 Sugarcane Variety Recommendations For Louisiana ..... 304
Louisiana Sugar Variety Census For 1959 ..... 191

## Committees

### VOLUME No. 36

Standing Committees Of The American Sugar Cane League ..... 92

## Crop Statistics

### VOLUME No. 36

Proportionate Shares Harvested For Sugar—Yield Of Cane Per Acre—Yields of Recoverable Sugar Per Acre ..... 287
Milling Results 1948-1957 ..... 288
Growers' Income, Dollars, The Ton Of Sugarcane Delivered To Louisiana Sugar Mills 1937-1957 ..... 290
Number of Producer-payees, Number Of Farms Growing Sugarcane, and Average Sugarcane Acreage Growing Per Farm In Louisiana 1937-1957 ..... 291
Season Average Prices 1947-1957: Raws $ Per CWT—Blackstrap Cents Per Gallon—Standard Cane Dollars Per Ton—Molasses Bonus ¢ Per Actual Ton —Average Freight Differential ¢ ..... 293
Number Of Farms, Payees, Proportionate Share And Planted Acreage, And Tons Of Cane Marketed For Sugar 1957 Crop ..... 296
Tons Of Sugarcane Ground For Sugar, Total Amount Paid, And Amount Paid Per Actual And Standard Ton Of Sugarcane Ground By Louisiana Sugar Mills, 1957 Crop ..... 297

### VOLUME No. 37

Acreage Planted For Sugar And Seed 1948-1958 ..... 289
Yield Of Recoverable Sugar Per Acre 1955-1958 ..... 289
Yield Of Cane Per Acre 1955-1958 ..... 289
Milling Results 1949-1958 ..... 290
Growers Income 1937-1958 ..... 292
Farms By Size Groups 1958 Crop ..... 307
Payments 1958 Crop ..... 308
Producer-Payees, Number of Farms, and Average Acreage in Sugarcane Per Farm 1937-1958 ..... 309

## Determinations

### VOLUME No. 36

1957 Fair Price Determination ..... 22
Determination Of Commercially Recoverable Sugar, 1957 Crop ..... 115

### VOLUME No. 37

1958-1959 Fair Price Determination ..... 18
Determination Of Commercially Recoverable Sugar Mainland Cane Area 1958 Crop ..... 95
Commercially Recoverable Sugar 1958 Crop (Talbe) ..... 103

## Fertilizer

### VOLUME No. 36

1958 Fertilizer Recommendations For Sugarcane ..... 138
Losses In Transferring Anhydrous Ammonia ..... 231

### VOLUME No. 37

Fertilizer Investigations On Sugarcane At The Houma Station 1957 ..... 86
1959 Fertilizer Recommendations For Sugarcane ..... 133

## Florida

### VOLUME No. 36

Recapitulation Of Final Manufacturing Reports Of Florida Sugar Cane Factories Crop 1957-58 ..... 307

### VOLUME No. 37

Florida Wage Rates Announced ..... 266
Florida Manufacturing Report 1958-59 Crop ..... 313

## Market Statistics

### VOLUME No. 36


Sugar Market Statistics Through September 25, 1957 ..... Pag
Sugar Market Statistics Through October 25, 1957 ..... 4


### VOLUME No. 37


Sugar Market Statistics Through September 25, 1958 ..... 1
Sugar Market Statistics Through November 10, 1958 ..... 5
Sugar Market Statistics Through January 26, 1959 ..... 11
Sugar Market Statistics Through February 13, 1959 ..... 12
Sugar Market Statistics Through March 25, 1959 ..... 15
Sugar Market Statistics Through May 25, 1959 ..... 20
Sugar Market Statistics Through June 10, 1959 ..... 22


## Mill Marketing Allotments

### VOLUME No. 36


Testimony By W. S. Chadwick At The 1958 Marketing Allotments Hearing February 25, 1958 ..... 15
Final Mill Marketing Allotments 1957 Crop ..... 29


### VOLUME No. 37


Testimony of W. S. Chadwick At Marketing Allotment Hearing—March 10, 1959.. 14


## Mosaic Disease

### VOLUME No. 37


Strains Of Sugarcane Mosaic Virus In Louisiana ..... 4
Sugarcane Mosaic Again On The Increase—A Warning ..... 12
Recommendations For The Control Of Mosaic Disease In Sugarcane In Louisiana For 1959 ..... 16
Importance Of Mosaic Disease In Present Commercial Varieties Of Sugarcane In Louisiana ..... 17


## Production

### VOLUME No. 36


Mainland Cane Area Sugar Production By Type ..... 10
Louisiana Sugar Production, 1957 Crop ..... 15
Louisiana Molasses and Syrup Production, 1957 Crop ..... 15
Production: Sugar, Syrup and Molasses 1948-1957 ..... 28
Production of Sugar In Louisiana 1900-1957 ..... 28
Production By Louisiana Cane Mills, 1957 Crop ..... 29


### VOLUME No. 37


Production Of Sugar By Types, 1958 Crop ..... 11
Production Of Molasses and Syrup, 1958 Crop ..... 11
Production Of Sugar, Syrups and Molasses 1949-1958 ..... 29
Production Of Sugar In Louisiana 1900-1958 ..... 29
Production By Louisiana Cane Mills 1958 Crop ..... 31


## Proportionate Shares

### VOLUME No. 36


1958 Crop Proportionate Shares ..... 3
Hearing Set May 20th In New Orleans On 1959 Mainland Sugarcane Acreage ..... 20
Testimony Of William S. Chadwick At The 1959 Proportionate Shares Hearing .... 21
Proportionate Shares 1959 Crop ..... 33


### VOLUME No. 37


Acreage Restrictions Eased For 1959 ..... 14
Hearing Set April 30 On 1960 Mainland Sugarcane Acreage ..... 17
Proportionate Shares 1958 ..... 28
Proportionate Shares Harvested For Sugar 1955-1958 ..... 28


## Quotas

### VOLUME No. 36


U.S.D.A. Announces Revision Of 1957 Sugar Quotas ..... 7
Puerto Rican And Hawaiian Deficits Reallocated ..... 19
Deficit In Hawaiian Quota Of Sugar For Local Consumption Is Prorated ..... 20
Deficits In Sugar Quotas For Puerto Rico And Hawaii Prorated To Other Areas.... 20
USDA Announces Increase In Domestic Sugar Quota ..... 22
Deficit In Sugar Quotas For Hawaii And Puerto Rico Prorated To Other Areas.... 22
USDA Announces Increase In Domestic Sugar Quota ..... 26

VOLUME No. 37 Page
USDA Announces Increase In Domestic Sugar Quota ..... 22
Quotas Increased To 9,200,000 Tons ..... 43
Permitted Sugar Imports From Peru Increased ..... 50
50,000 Ton Beet Deficit Declared, Quota For Cuba Increased 50,000 Tons ..... 66
1959 Consumption Estimate 9,200,000 Tons ..... 83
Sugar Quotas Totaling 9,200,000 Tons Announced For 1959 ..... 102
Deficits Prorated ..... 312
USDA Announces Increase In Domestic Sugar Requirements ..... 334

## Quotations

VOLUME No. 36
Official Prices 1957-58 Pricing Period ..... 181
Quotations Issued By The Louisiana Sugar Exchange On Raw Sugar And Blackstrap Molasses—1957-58 Pricing Period ..... 190

VOLUME No. 37
Official Prices, 1958-59 Pricing Period ..... 146
Quotations Issued By The Louisiana Sugar Exchange On Raw Sugar And Blackstrap Molasses 1958-59 Pricing Period ..... 306

## Research

VOLUME No. 36
Preliminary Studies Of Effects Of Gibberellic Acid Upon Sugarcane ..... 24
Nutria Control In Louisiana ..... 57
Sugarcane Breeding At Canal Point, Florida, During 1957 ..... 240
Chemical Control Of Tie-Vines In Sugarcane ..... 302
Fresher Cane Increases Sugar Recovery And Profits For Both Growers And Processors ..... 343

VOLUME No. 37
Processing Of New Commercial And Unreleased Sugarcanes Comparison With The Standard Commercial Cone In Pilot Plant Clarification ..... 29
The Effects Of Various Levels Of Raw Sugar In Growing-Fattening Rations For Swine ..... 52
Fire Ant Eradication Program Increases Damage By The Sugarcane Borer ..... 62
Physical Properties Of Soils In The Sugarcane Area Of Louisiana ..... 104
A New Crop Rotation System ..... 106
Transition: Effectiveness And Implications Of Breeding Sugarcane In An Indoor Environment At Canal Point, Florida ..... 229
Effect Of Depth Of Placement Of Seed Piece and Date Of Planting On Yields Of Cane And Sugar From C.P. 36-105 And C.P. 44-101 At Houma, Louisiana .... 260
Diseases In Relation To Variety Plantings In 1959 ..... 272
Processing Of New Commercial And Unreleased Sugarcanes—Results Of Clarification Experiments During The 1958 Season ..... 274
Results Of Sugarcane Variety Tests In Louisiana During 1958 ..... 293

## Stunting Disease

VOLUME No. 36
Studies Of The Effect Of The Ratoon Stunting Disease On Yields Of Sugarcane Varieties Presently Grown In Louisiana ..... 163
Control Of The Ratoon Stunting Disease Of Sugarcane In Louisiana With Hot-Air During The Past Three Seasons ..... 303

## Wage Rates

VOLUME No. 36
1957 Harvesting and 1958 Cultivation Wage Rates ..... 23

## Weed Control

VOLUME No. 37
Recommendations For Johnson Grass Seedling And Johnson Grass Control In Sugarcane ..... 123

## Weekly Average Prices

VOLUME No. 36
Weekly Average Prices ..... 123

VOLUME No. 37
Weekly Average Prices ..... 126
1958-59 Pricing Period Completed ..... 134

## Miscellaneous

### VOLUME No. 36

Pag

Report Of President Graugnard To The Thirty-Fifth Annual Meeting Of The American Sugar Cane League
Address By Congressman Edwin E. Willis At High Yields Award Luncheon
New Guinea Trip Enhances USDA'S World Sugarcane Collection ... 3
Effect Of Wind Damage On New Sugarcane Varieties In Louisiana ... 5
Stubble Eliminator ... 6
Jos Ferris Testifies For Both Louisiana and Florida At Consumption Hearing ... 7
Index For Volumes 34 and 35 ... 8
Talk By F. Evans Farwell At Southern Farm Forum ... 11
Stand Prospects For The 1958 Sugar Crop ... 16
President Farwell Reports To The Annual Meeting Of The Louisiana Sugar Exchange, Inc. ... 18
Retirement Of Dr. Thomas Bregger ... 34
Queen Billie Jon Mulhearn ... 34

### VOLUME No. 37

President Thibaut Addresses Annual Meeting
Attention Gas Royalty Owners ... 8
T. M. Barker Addresses The Southern Farm Forum ... 11
Address of F. Evans Farwell To The Annual Meeting Of The Louisiana Sugar Exchange, Inc. ... 15
Molasses Supply By Major Sources ... 22
Wage-Price Hearing July 30th ... 25

# STANDING COMMITTEES OF THE AMERICAN SUGAR CANE LEAGU

### FINANCE COMMITTEE

F. A. Graugnard, Jr., Chairman
St. James, La.
T. M. Barker, Lockport, La.
L. A. Borne, Raceland, La.
F. M. Burley, Youngsville, La.
J. P. Duhe, Jeanerette, La.
F. Evans Farwell,, 1002 Whitney Bldg.,
New Orleans 12, La.
Murphy J. Foster, Franklin, La.
W. F. Giles, R.F.D., Box 357,
Jeanerette, La.
W. C. Kemper, P. O. Box 910
New Orleans 8, La.
John B. Levert, 823 Perdido Street,
New Orleans 12, La.
J. J. Munson, Houma, La.
Ed. Schexnayder, P. O. Box 577
White Castle, La.
J. J. Shaffer, Jr., Rt. 2, Box 733
Houma, La.
Bronier Thibaut, Napoleonville, La.

### LEGISLATIVE COMMITTEE

W. C. Kemper, Chairman, P. O. Box 910
New Orleans 8, La.
Thomas H. Allen, Franklin, La.
T. M. Barker, Lockport, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
W. F. Giles, R.F.D., Box 357
Jeanerette, La.
F. A. Graugnard, Jr., St. James, La.
James Graugnard, St. James, La.
John B. Levert, 823 Perdido Street
New Orleans 12, La.
J. J. Munson, Houma, La.
D. W. Pipes, Jr., Houma, La.
Ed. Schexnayder, P. O. Box 577
White Castle, La.
J. J. Shaffer, Jr., Rt. 2, Box 733
Houma, La.
Bronier Thibaut, Napoleonville, La.
Dubourg Thibaut, Donaldsonville, La.
Horace Wilkinson III, Port Allen, La.

### CONTACT COMMITTEE

Malcolm Duhe, Chairman, Rt. 2, Box 225
New Iberia, La.
Robert Allain, Jeanerette, La.
Irving Arceneaux, Napoleonville, La.
Louis Arceneaux, Route 1, Box 75
Port Allen, La.
Lynn V. Arceneaux, Supreme, La.
Luke B. Babin, White Castle, La.
Sterling Bain, Bunkie, La.
Rodney Banta, Jeanerette, La.
John W. Barker, Lockport, La.
John Best, Lobdell, La.
Brandon Beyt, St. Martinville, La.
Emile Billeaud, Broussard, La.
Norman J. Boudreaux
St. Martinville, La.
H. K. Bubenzer, Bunkie, La.
Edward Burguieres, Louisa, La.
F. M. Burley, Youngsville, La.
Clegg Caffery, Franklin, La.
John Vernon Caldwell, Thibodaux, La.
Paul Cancienne, Belle Rose, La.
P. J. de Gravelles, Franklin, La.
P. J. de Gravelles, Jr., Franklin, La.
Ben Devall, Rt. 1, Port Allen, La.
C. A. Duplantis, Franklin, La.

V. R. Ellender, Bourg, La.
)r. Charles H. Fisher, Chief
Southern Utilization Branch, U.S.D.A.
Agricultural Research Service
1100 Robert E. Lee Blvd.,
New Orleans 19, La.
R. T. Gibbens, Jr., Mathews, La.
Jlysse Consoulin, Jr., New Iberia, La.
Eugene Graugnard, St. James, La.
ohn Harris, 124 W. Washington St.,
New Iberia, La.
Moise Hymel, Gramercy, La.
E. L. Klock, Meeker, La.
George C. Kuhlman, Centerville, La.
)vide B. LaCour, Batchelor, La.
Malcolm J. Lasseigne, Franklin, La.
)ennis Lanaux, Glendale Plantation
Lucy, La.
Ridley J. LeBlanc, Raceland, La.
. C. Levert, Jr., Thibodaux, La.
. Wilson Lepine, Thibodaux, La.
Earl G. Luke, Rt. 1, Chatsworth
Franklin, La.
. B. Luke, Jr., Bunkie, La.
E. A. Maier, Houma, La.
Richard McCarthy, Jr.
1105 Carondelet Bldg.
New Orleans 7, La.
William McCollam, Houma, La.
Horace Nelson, 523 Foret St.
Thibodaux, La.
Randolph Roane, Jr., Jeanerette, La.
Felix Savoie, Paincourtville, La.
D. J. Senette, Franklin, La.
M. Lee Shaffer, South Coast Corp.
Houma, La.
L. S. Shaw, Hopeland Plantation
R.F.D., New Iberia, La.
A. J. Simoneaux, Donaldsonville, La.
G. C. Smith, Patterson, La.
Floyd Spencer, Angola, La.
Clay Terry, Franklin, La.
A. A. Thibaut, New Roads, La.
Bronier Thibaut, Napoleonville, La.
James Thibaut, P. O. Box 431
Donaldsonville, La.
Alex Thibodaux, Erath, La.
Howard A. Thibodeaux, Franklin, La.
F. C. Townsend, Bunkie, La.
Clarence Waguespack, Vacherie, La.
M. V. Yarbrough, Youngsville, La.

Also: Scientists at L.S.U., Houma, and Canal Point Stations and So. Reg. Lab.

## MOSAIC DISEASE CONTROL COMMITTEE
**(Sub-Committee of Contact Committee)**

M. Lee Shaffer, Chairman
South Coast Corp., Houma, La.
E. V. Abbott, U.S.D.A. Experiment
Station, Houma, La.
Louis Arceneaux, Route 1, Box 75
Port Allen, La.
R. D. Breaux
U.S.D.A. Experiment Station
Houma, La.
S. J. P. Chilton, L.S.U.
Baton Rouge, La.
Gilbert J. Durbin, 414 Whitney Building
New Orleans, La.
I. L. Forbes, L.S.U., Baton Rouge, La.
Lloyd L. Lauden, 414 Whitney Bldg.
New Orleans, La.
Clifford LeBlanc, White Castle, La.
Denver Loupe, Extension Service, L.S.U.
Baton Rouge, La.
William McCollam, Southdown, Inc.
Houma, La.
R. J. Steib, L.S.U., Baton Rouge, La.

## COMMITTEE ON SELECTION OF VARIETIES FOR TESTING AND INCREASE
**(Sub-Committee of Contact Committee)**

Membership varies. Members appointed by Chairman of Contact Committee to handle specific assignments.

## RESEARCH COORDINATING COMMITTEE
**(Sub-Committee of Contact Committee)**

Horace Nelson, Chairman, 523 Foret St.
Thibodaux, La.
Lloyd L. Lauden, 414 Whitney Bldg.
New Orleans 12, La.
M. V. Yarbrough, Youngsville, La.

## STUNTING DISEASE CONTROL COMMITTEE
**(Sub-Committee of Contact Committee)**

Louis Arceneaux, Chairman
Route 1, Box 75, Port Allen, La.
E. V. Abbott
U.S.D.A. Experiment Station,
Houma, La.
S. J. P. Chilton, L.S.U.
Baton Rouge 3, La.
Lloyd L. Lauden, 414 Whitney Bldg.
New Orleans 12, La.
William McCollam, Houma, La.
C. W. Upp, L.S.U., Baton Rouge 3, La.

## FREIGHT RATE COMMITTEE

Lucien Bauduc, Chairman
South Coast Corp., Carondelet Bldg.
New Orleans 12, La.
Thomas H. Allen, Franklin, La.
F. Evans Farwell, 1002 Whitney Bldg.
New Orleans 12, La.
L. C. Gerard, 726 Whitney Bldg.
New Orleans 12, La.
W. F. Rellstab, J. Aron & Co., Inc.
336 Magazine St., New Orleans 12, La.
H. C. Vaccaro, P. O. Box 910
New Orleans 8, La.
M. V. Yarbrough, Youngsville, La.

## LABOR COMMITTEE

T. M. Barker, Chairman, Lockport, La.
J. A. Akers, Rt. 1, Box 79
New Iberia, La.
Sterling Bain, Bunkie, La.
Jules M. Burguieres, Louisa, La.
F. M. Burley, Youngsville, La.
W. S. Chadwick, P. O. Box 910
New Orleans 8, La.
Fernand Falgoust, St. James, La.
Murphy Foster, Franklin, La.
Andrew P. Gay, Plaquemine, La.
Ulysse Gonsoulin, Jr., New Iberia, La.
M. J. Kahao, Route 1, Port Allen, La.
Wilson Lepine, Thibodaux, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., P. O. Box 583
New Orleans 7, La.
Horace Nelson, 523 Foret St.
Thibodaux, La.
Lawrence Noel, Donaldsonville, La.
Felix Savoie, Paincourtville, La.
Dubourg Thibaut, Donaldsonville, La.
Joseph Thibodaux, R.F.D. #1
Thibodaux, La.
Rouby Thibodaux, 132 Suthon Avenue
Houma, La.
Roland Toups, South Coast Corporatio
Houma, La.
Ivan Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.

## INDUSTRIAL COMMITTEE

J. H. Thibaut, Chairman, P. O. Box 431
Donaldsonville, La.
Victor J. Bailliet, Thibodaux, La.
Frank L. Barker, Jr., Lockport, La.
F. Evans Farwell, 1002 Whitney Bldg.
New Orleans 12, La.
J. N. Foret, Supreme, La.
Will G. Gibbens, Jr., 726 Whitney Bldg.
New Orleans 12, La.
Wilmer Grayson, 528 Monroe St.,
Alexandria, La.
W. F. Guilbeau
Southern Regional Laboratory
1100 Robert E. Lee Blvd.
New Orleans 19, La.
A. J. Isacks, Southdown, Inc.
Houma, La.
Arthur G. Keller, L.S.U.
Baton Rouge 3, La.
Irving Legendre, Lafourche Sugar Co.
Thibodaux, La.
Dr. L. F. Martin, Southern Regional Lab
1100 Robert E. Lee Blvd.
New Orleans 19, La.
E. W. McNeil, Cinclare, La.
M. J. McNulty, Franklin, La.
Charles C. Savoie, Belle Rose, La.
Carl Stewart, Audubon Sugar Factory
L.S.U., Baton Rouge 3, La.
Roland Toups, South Coast Corp.
Houma, La.
Frank A. Vought, Dugas & LeBlanc,
Paincourtville, La.
M. V. Yarbrough, Youngsville, La.

## RAW SUGAR COMMITTEE

J. B. Levert, Chairman, 823 Perdido St.
New Orleans 12, La.
A. V. Allain, Rt. 1, Box 368
Jeanerette, La.
Thomas H. Allen, Franklin, La.
Jules Burguieres, Louisa, La.
F. Evans Farwell, 1002 Whitney Bldg.
New Orleans 12, La.
F. A. Graugnard, Jr., St. James, La.
W. F. Giles, R.F.D., Box 357
Jeanerette, La.
Lionel Kling, New Iberia, La.
E. W. McNeil, Cinclare, La.
Sabin Savoie, Belle Rose, La.
Ed. Schexnayder, Box 577
White Castle, La.
M. V. Yarbrough, Youngsville, La.

## BLACKSTRAP MOLASSES COMMITTEE

Roland Toups, Chairman
South Coast Corp., Houma, La.
Jules M. Burguieres, Louisa, La.
W. C. Kemper, P. O. Box 910
New Orleans 8, La.
Irving Legendre, Thibodaux, La.
D. W. Pipes, Jr., Houma, La.

## EDIBLE MOLASSES COMMITTEE

Edward T. Supple, Chairman
Bayou Goula, La.
F. Evans Farwell, 1002 Whitney Bldg.
New Orleans 12, La.
Casimir Graugnard, Edgard, La.
Paul Kessler, White Castle, La.
Claude H. Levet, Reserve, La.

## SYRUP COMMITTEE

Paul Kessler, Chairman
White Castle, La.
F. Evans Farwell, 1002 Whitney Bldg.
New Orleans 12, La.
Claude H. Levet, Reserve, La.

## FLOOD CONTROL COMMITTEE

E. W. McNeil, Chairman, Cinclare, La.
Brandon Beyt, St. Martinville, La.
Frank Carruth II, Lobdell, La.
A. L. Casselman, Jeanerette, La.
Sabin Savoie, Belle Rose, La.
C. J. Talbot, Valverda, La.
John Tregre, Route 2
Napoleonville, La.
C. O. Watts, Rougon, La.

### FARM MACHINERY ADVISORY COMMITTEE

M. V. Yarbrough, Chairman
Youngsville, La.
E. V. Abbott
U.S.D.A Experiment Station
Houma, La.
T. M. Barker, Lockport, La.
Harold T. Barr, L.S.U.
Baton Rouge 3, La.
Eugene H. Graugnard, St. James, La.
Arthur G. Keller, L.S.U.
Baton Rouge 3, La.
Ridley LeBlanc, Raceland, La.
Thomas Lowe, Southdown, Inc.
Thibodaux, La.
J. J. Munson, Houma, La.
Joseph Pugh, J. & L. Engineering Co.
Jeanerette, La.
R. M. Ramp
U.S.D.A. Experiment Station
Houma, La.
I. L. Saveson
Agricultural Engineering Bldg.
L.S.U., Baton Rouge 3, La.
Charles Savoie, Belle Rose, La.
Clay Terry, Franklin, La.
B. C. Thomson, Thomson Machinery Co.
Thibodaux, La.
Roland Toups, South Coast Corp.
Houma, La.

### BAGASSE COMMITTEE

Thomas H. Allen, Chairman,
Franklin, La.
T. M. Barker, Lockport, La.
Felix P. Broussard, Jeanerette, La.
A. E. Hughes, Iberia Sugar Coop.
New Iberia, La.
A. J. Isacks, Houma, La.
Charles Savoie, Belle Rose, La.
Dubourg Thibaut, Donaldsonville, La.
Roland Toups, South Coast Corp.
Houma, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

### DRAINAGE AND DEEP TILLAGE COMMITTEE

Eugene Graugnard, Chairman
St. James, La.
J. P. Duhe, Jeanerette, La.
Horace Wilkinson III, Port Allen, La.

### PROPORTIONATE SHARE COMMITTEE

W. S. Chadwick, Chairman
P. O. Box 910, New Orleans 8, La.
T. M. Barker, Lockport, La.
T. M. Burley, Youngsville, La.
Don Caffery, Franklin, La.
E. A. Dornier, Central, La.
James Graugnard, St. James, La.
Earl G. Luke, Route 1, Chatsworth
Franklin, La.
J. J. Munson, The South Coast Corp.
Houma, La.
Charles Naquin, Lafourche Sugar Co.
Thibodaux, La.
R. L. Roane, Jr., Albania Sugar Co.
Jeanerette, La.
Charles Savoie, Belle Rose, La.
Ed. Schexnayder, Box 577
White Castle, La.
J. J. Shaffer, Jr.
Thomson Machinery Co
Thibodaux, La.
Alfred A. Thibaut, New Roads, La.
M. V. Yarbrough, Youngsville, La.

### TRASH AND CANE HANDLING COMMITTEE

Roland Toups, Chairman
South Coast Corp., Houma, La.
John Best, Lobdell, La.
Eugent Graugnard, St. James, La.
Mansel Mayeaux, L.S.U.
Baton Rouge, La.
Charles Savoie, Belle Rose, La.

## SUGAR QUOTAS TOTALING 9.4 MILLION TONS ANNOUNCED FOR 1960

The amount of sugar needed to meet the requirements of consumers in the continental United States for the calendar year 1960 was estimated at 9.4 million short tons, raw value, and quotas totaling the same amount were established December 17th by the Acting Secretary of Agriculture. This is the same level of requirements currently in effect for the 1959 calendar year. The 1959 requirements were initially established at 8.1 million tons before subsequent increases brought them to the present level of 9.4 million tons.

Sugar quotas govern the supply of sugar from all sources, foreign and domestic, available to the continental United States. The quotas announced December 17th are expected to provide a supply of sugar adequate to meet normal needs in 1960.

The sugar quotas for individual areas and countries, and the quantities that may be filled by direct-consumption sugar, are shown in the

accompanying table.

| Area and Country: | Quota (short tons, raw value) | Direct-consumption limit |
|---|---|---|
| Domestic beet sugar | 2,043,480 | no limit |
| Mainland cane sugar | 628,799 | no limit |
| Hawaii | 1,140,462 | 32,106 |
| Puerto Rico | 1,192,498 | 139,161 |
| Virgin Islands | 16,261 | 0 |
| Republic of the Philippines | 980,000 | 59,920 |
| Cuba | 3,779,655 | 375,000 |
| Peru | 95,527 | 10,094 |
| Dominican Republic | 81,457 | 9,000 |
| Mexico | 64,809 | 16,347 |
| Nicaragua | 14,027 | 10,779 |
| Haiti | 7,014 | 7,000 |
| Netherlands | 3,731 | 3,731 |
| China | 3,624 | 3,624 |
| Panama | 3,624 | 3,624 |
| Costa Rica | 3,616 | 3,616 |
| Canada | 631 | 631 |
| United Kingdom | 516 | 516 |
| Belgium | 182 | 182 |
| British Guiana | 84 | 84 |
| Hong Kong | 3 | 3 |
| All other countries | 0 | 0 |

The "Statement of Bases and Considerations" with regard to requirements included in the determination, schedule for publication in the Dec. 22 Federal Register, is as follows:

"*Requirements.* Section 201 of the Sugar Act of 1948, as amended, provides that in determining the quantity of sugar needed to meet the requirements of consumers in the continental United States (total of quotas) the Secretary shall use as a basis the quantity of sugar distributed in the 12 months ended Oct. 31 prior to the year to which the requirements apply, shall make allowances for a deficiency or surplus in inventories of sugar and for changes in consumption because of changes in population and demand conditions and, in addition, shall consider the relationship between wholesale prices for refined sugar and the Consumers' Price Index.

"Approximately 9.2 million tons of sugar were distributed by primary distributors in the year ended Oct. 31, 1959. There is no evidence that inventories of sugar in the hands of industrial users, wholesalers and r tailers at the end of the year we substantially different than those the beginning.

"On the basis that sugar consum tion amounted to 9.2 million tons the year ending Oct. 31, normal pop lation growth would indicate th consumption would amount to 9,37 000 tons in the calendar year 196 Normally there is a loss of abo 50,000 tons of quota sugar in t refining process.

"Inventories of quota sugar by r finers at the begining of 1960 a expected to be at least 50,000 to larger than they were a year earli but a further increase is anticipat in 1960 as a result of larger year-e supplies from the Mainland Ca Sugar Area.

"The wholesale price of refin sugar at New York currently is 9. cents per pound or 95 percent of t level (10.05 cents) that would computed on the basis of the Co sumers' Price Index in accordan with section 201 of the Act.

"After consideration of all of t relevant conditions, sugar quot totaling 9.4 million tons are det mined to be needed to meet the r quirements of consumers in 1960."

—o—

## IN WASHINGTON

(Continued from page 81)

eign Relations Committee will pro ably be asked to investigate the "ov quick" recognition of the Revolutio ary regime.

Somebody slipped — the Forei Relations Comimttee may want know his name and why such a lossal error was made. Just h sweeping the investigation will be mains to be seen, but it should r be difficult for the committee to fi out that our difficulties arise fr a faulty appraisal of Castro and associates; his brother Raoul, Maj Guevara and their communist aff ations, that was made in a lower ecl lon of the State Department. A the committee may want to kn why these errors were not caught a corrected by the responsible top m in the Department.

Chemistry Library,
Louisiana State University,
University, Station
Baton,Rouge,La. (3)

# THE SUGAR BULLETIN

38—No. 8 JANUARY 15, 1960

*ial Bulletin of the American Sugar Cane League of the U. S. A.*

PRINTED ON PAPER MADE FROM
LOUISIANA SUGAR CANE BAGASSE

## *In This Issue*

Up Front With The League ..... 95
**The Virus—Farm Forum Jan. 21 and 22**

In The Field With Lloyd L. Lauden ..... 96
**Scientists To Meet**

The Sugarcane Mosaic Situation In Louisiana In 1959 ..... 97

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry

# SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Edito

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

**Issued on the 1st and 15th of each month.** **Subscription: Member 50 cents a year. Non-Members $3.00 a year.**

**Washington Office, 510 Union Trust Bldg., Washington, D. C.**
**Josiah Ferris, Manager**



**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
W. F. Giles, Jeanerette, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.


*We stand for the encouragement of Home Industries as against Foreign Competition*

# UP FRONT WITH THE LEAGUE

*by A. W. Dykers*

## The Virus

This is the time of year when that ıigma of the medical profession, the rus, rules supreme. Most everyody we talk with either has it, has ıst had it, or fully expects to have

Joe Ferris has it and, as you will ote, wasn't able to write his report. hose of us who have had it feel just ıat way, and the folks who havn't ıd it are giving us germ factories ıat "don't come near me look" and lling up on vitamin pills. It is ough.

We have a sneaking notion that ıe Old Mule has it. He's as weak a field mouse. Since the first of ovember the price of raw sugar has ıidded seventy-four (74) cents a ındred pounds and, unless someody does something about it double uick, the 1959-60 sugar pricing perid is going to end up with a season's verage price below that of last year.

Our experience with the medics dicates that standard treatment for ıis virus thing is aspirin and hope. his might be allright for us but not r the Old Mule. It's too darn inıman.

## Farm Forum Jan. 21 and 22

The 13th Annual Southern Farm orum, which is sponsored each year the Agricultural Committee of the hamber of Commerce of the New rleans Area, will be held at the oosevelt Hotel in New Orleans on hursday and Friday, January 21st nd January 22nd. Everyone interested in the problems of agriculture invited to the Forum.

A. J. Rhodes, Area Development ssistant Manager of the Louisiana Power and Light Co., is Chairman of the Forum, and Gilbert J. Durbin, General Manager of the American Sugar Cane League, is the Vice-Chairman. George R. Queen, County Agent of Orleans Parish, is the Secretary.

The main theme of the meeting this year will be "Changing Marketing Methods In Southern Agriculture." The program of the two day sessions is as follows:

THURSDAY, JANUARY 21

9:15 A.M.—Opening of Forum by A. J. Rhodes, Chairman, Farm Forum Committee

Introductions by the Chairman.

Presiding Officer—W. C. Lasseter, Chairman, Southwide Farm Forum Advisory Committee, Editor, The Progressive Farmer, Memphis, Tennessee.

SUBJECT—*"Opportunities in Using Idle Acres"*

*Year-round Pastures*—
W. R. Thompson, Agronomist, Agricultural Extension Service, State College, Mississippi.

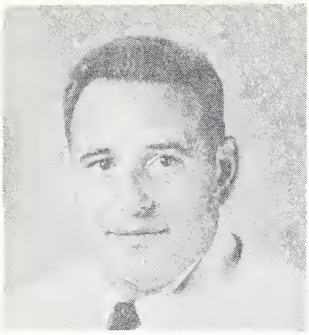
*Soybeans for Processing*—
Edgar E. Hartwig, Research Agronomist, Delta Branch Experiment Station, Stoneville, Mississippi.

*Sweet Potatoes*—
Claude A. Watson (farmer), Wisner, Louisiana.

*Plastic Greenhouse Tomatoes*—
Joseph Montelaro, Specialist (Horticulture), Agricultural Extension Service, L.S.U., Baton Rouge, Louisiana.

*Forestry*—
James E. Mixon, Louisiana For-

(Continued on page 102)



# IN THE FIELD WITH LLOYD LAUDEN

*by Lloyd L. Lauden*

## Scientists To Meet

On Tuesday, January 26, the scientists of Louisiana State Experiment Station and the United States Department of Agriculture will get together with the county agents throughout the sugar belt for an all day meeting. This meeting is one of the most important meetings of the year to the Louisiana sugar industry because it is here that the scientists discuss the past year's research work with the county agents. It is also here that many questions arise which encourage and inspire future research projects. Representatives from all research departments working on sugar cane present the information found and make recommendations. Sugar cane varieties are always an important item at this meeting. The results of the test field experiments are usually given. The information shows which varieties were superior last year in all test field locations. This information is collected each year for all varieties on the test fields. These experiments are carefully controlled by experts in this field. Each year the new information is added to the results of the past years. The results of several years are always better than one year's results. Scientists and county agents make recommendations only when experiments have proven beyond doubt that the recommendation is good.

Another item which is usually of particular interest at this meeting is the discussion of sugar cane diseases. It was sugar cane diseases that nea ly ruined the industry 35 years ag Through the cooperative efforts the plant breeders together with t pathologists and scientists and t American Sugar Cane League th industry was returned to its prese stage. It is important to note th Mosaic disease is again showing i ugly head. To add to this, a ne strain was recently recognized. Wo has already begun to combat th new strain of Mosaic disease. T sugar cane plant breeders hope find resistance in the new varieti bred each year. A committee h been set up to work on a Mosaic di ease control program. This commi tee will meet before the January Extension Research meeting. Gro ers can be sure that the scientist the county agents, and the Americ Sugar Cane League will do ever thing possible to keep this disea under control.

Many other interesting researc projects are usually discussed a reported upon at this meeting.

It is so very easy to take for gran ed the very important work done the Experiment Stations and the E tension Service. The industry mu always remember to be grateful f the very excellent services and gui ance given by these very dedicat men. It must also be noted that wit out this help the industry would sur ly fall and in not too many years.

# HE SUGARCANE MOSAIC SITUATION IN LOUISIANA IN 1959

*by R. J. Steib and I. L. Forbes*

Reports made by scientists and thers during the past few years in- icated the presence of sugarcane iosaic in an increasing amount in .P. 44-101 and N.Co. 310. Of the wo, N.Co. 310 was the most seri- usly affected.

A trace of mosaic has been re- orted for a number of years in very commercial variety in the Race- nd area, however, until the last ew years the disease was observed nly occasionally in the remainder f the sugar belt. The disease was ound in C.P. 44-101 in the Reserve rea of St. John Parish in 1952. At ne location, fields with two to five er cent mosaic were found at that me. Observations made in 1955, hile investigating the Ratoon Stunt- ig Disease, revealed the presence of iosaic in C.P. 44-101 and N.Co. 310 i St. Charles and Lafourche Par- hes. The disease was observed in 956, 1957 and 1958 and was found ) be increasing in the two varieties. : was also found to be spreading in ie Mississippi and Bayou Lafourche reas. Traces of the disease were lso found in C.P. 36-105, C.P. 44- 55, C.P. 48-103 and in the newly eleased variety C.P. 52-68. Abbott 2, 3, 4), Forbes and Steib(5, 6), teib(7), scientists of both stations 1) and County Agents have followed nd reported on the development of ie disease in the Louisiana Sugar- ane Industry. Recommendations for ie control of the disease were also idely publicized.

In order to determine where the isease was most prevalent and pro- uction areas most seriously affected, survey was made in the spring nd early summer of 1959. A total f 202 fields were inspected between pril and June. This included 87 elds in 2 parishes of the Bayou afourche area, 82 fields in 6 par- hes of the Mississippi River area, 3 fields in 3 parishes in the Western area and 10 fields in 1 parish in the Bunkie area.

Table 1 shows the amount of mosaic found in the four major sugar producing areas in varieties C.P. 44-101, N.Co. 310, and C.P. 52-68.

## Mosaic in the Bayou Lafourche Area

In this area, the disease was found to be more widespread in Lafourche than in any other parish. Two fields of C.P. 44-101 and 4 of N.Co. 310 were found with between 10 and 25 per cent mosaic and one each with over 25 per cent. In Ascension Parish, a trace was found in C.P. 44-101 and C.P. 52-68 and from 10 to 25 per cent infection in one field of N.Co. 310. Other fields of N.Co. 310 showed a trace in one, 1 to 2 per cent in two and 2 to 10 per cent in two. Mosaic was found generally throughout N.Co. 310 in Assumption Parish, with only a trace of the disease in C.P. 44-101 and C.P. 52-68. A very complete survey was made in the parish with the assistance of the County Agent. It is significant to note that C.P. 52-68 which was released in 1958 had a trace of mosaic in eleven fields and between 1 and 2 per cent in another field, out of 17 fields inspected in the three parishes of the Bayou Lafourche area. Of the three varieties checked in this area, the disease was found in 56 out of 87 fields, and of these, 15 of N.Co. 310 and 4 of C.P. 44-101 could not have been rogued successfully because infection was over 2 per cent.

The data clearly show that mosaic is already a serious problem in the Bayou Lafourche area and every effort should be made in 1960 to eliminate the disease in fields to be used for seed. A special effort should be made to obtain disease free seed of C.P. 52-68 because it is still on a relatively small acreage.

(Continued on next page)

## Mosaic in the Mississippi River Area

The mosaic problem is not as acute in this area, as in the Bayou Lafourche area; except in St. John and St. Charles parishes. In those two parishes, the disease has reached a high level; some fields of C.P. 44-10 and N.Co. 310 were found 100 pe cent infected. The disease was foun in the above two varieties and als in C.P. 52-68 in every parish in th area. Of 82 fields examined, 50 wer found infected, and of these, 27 ha

**Table I. Amount of mosaic found in the four major sugarcane growing areas during a survey conducted in 1959.**

| Parish | Free | Trace | 1-2 % | 2-10 % | 10-25 % | Over 25% | Total No. Field |
|---|---|---|---|---|---|---|---|
| **Bayou Lafourche Area** | | | | | | | |
| **C.P. 44-101** | | | | | | | |
| Ascension | 3 | 1 | - | - | - | - | 4 |
| Assumption | 5 | 2 | - | - | 1 | - | 8 |
| Lafourche | 2 | 1 | 2 | - | 2 | 1 | 8 |
| Totals | 10 | 4 | 2 | - | 3 | 1 | 20 |
| **N.Co. 310** | | | | | | | |
| Ascension | - | 1 | 2 | 2 | 1 | - | 6 |
| Assumption | 17 | 11 | 3 | 4 | 2 | - | 37 |
| Lafourche | - | 1 | - | 1 | 4 | 1 | 7 |
| Totals | 17 | 13 | 5 | 7 | 7 | 1 | 50 |
| **C.P. 52-68** | | | | | | | |
| Ascension | 1 | 3 | 1 | - | - | - | 5 |
| Assumption | 2 | 7 | - | - | - | - | 9 |
| Lafourche | 1 | 1 | 1 | - | - | - | 3 |
| Totals | 4 | 11 | 2 | - | - | - | 17 |
| **Mississippi River Area** | | | | | | | |
| **C.P. 44-101** | | | | | | | |
| Iberville | 8 | 4 | - | - | - | - | 12 |
| Point Coupee | 1 | 1 | - | - | - | - | 2 |
| St. Charles | 2 | - | - | - | - | 1 | 3 |
| St. James | 1 | 2 | 1 | - | - | - | 4 |
| St. John | - | 2 | - | 1 | - | 2 | 5 |
| West Baton Rouge | 5 | 2 | - | - | - | - | 7 |
| Totals | 17 | 11 | 1 | 1 | - | 3 | 33 |

able 1 (Continued). Amount of mosaic found in the four major sugarcane growing areas during a survey conducted in 1959.

| rish | Free | Trace | 1-2 % | 2-10 % | 10-25 % | Over 25% | Total No. Field |
|---|---|---|---|---|---|---|---|
| | | | N.Co. 310 | | | | |
| erville | 6 | 4 | - | - | - | - | 10 |
| int Coupee | 1 | - | - | 1 | - | - | 2 |
| . Charles | - | - | - | 2 | - | 1 | 3 |
| . James | - | 4 | - | 1 | - | - | 5 |
| . John | - | - | - | 2 | - | 3 | 5 |
| st Baton ouge | 2 | 2 | 2 | - | 1 | 1 | 8 |
| tals | 9 | 10 | 2 | 6 | 1 | 5 | 33 |
| | | | C.P. 52-68 | | | | |
| erville | 3 | - | 1 | - | - | - | 4 |
| int Coupee | 2 | - | - | - | - | - | 2 |
| . Charles | - | - | - | - | 1 | - | 1 |
| . James | - | 2 | - | - | - | - | 2 |
| . John | - | 2 | - | 1 | - | - | 3 |
| st Baton ouge | 1 | 2 | 1 | - | - | - | 4 |
| tals | 6 | 6 | 2 | 1 | 1 | 0 | 16 |
| | | | Western (Teche) Area | | | | |
| | | | C.P. 44-101 | | | | |
| fayette | 4 | - | - | - | - | - | 4 |
| . Martin | 2 | - | - | - | - | - | 2 |
| . Mary | 2 | 2 | - | - | - | - | 4 |
| tals | 8 | 2 | - | - | - | - | 10 |
| | | | N.Co. 310 | | | | |
| fayette | 2 | - | - | - | - | - | 2 |
| . Martin | 1 | 1 | - | - | - | - | 2 |
| . Mary | - | 3 | - | - | - | - | 3 |
| tals | 3 | 4 | - | - | - | - | 7 |

Table 1 (Continued). Amount of mosaic found in the four major sugarcane growi areas during a survey conducted in 1959.

| Parish | Free | Trace | 1-2 % | 2-10 % | 10-25 % | Over 25% | Total No. Fie |
|---|---|---|---|---|---|---|---|
| | | | C.P. 52-68 | | | | |
| Lafayette | 1 | - | - | - | - | - | 1 |
| St. Martin | 1 | 1 | - | - | - | - | 2 |
| St. Mary | 1 | 2 | - | - | - | - | 3 |
| Totals | 3 | 3 | - | - | - | - | 6 |
| | | | Bunkie Area | | | | |
| | | | C.P. 44-101 | | | | |
| Rapides | 3 | - | - | - | - | - | 3 |
| | | | N.Co. 310 | | | | |
| Rapides | 4 | - | - | - | - | - | 4 |
| | | | C.P. 52-68 | | | | |
| Rapides | 3 | - | - | - | - | - | 3 |

only a trace of mosaic. The most seriously affected variety was N.Co. 310. The disease was found in 24 fields of 33 inspected; 5 of which were over 25 per cent infected. With C.P. 44-101, of 33 fields checked, 11 were found with a trace, 2 with between 1 to 2 per cent, 6 with between 2 to 10 per cent, 1 with 10 to 25 per cent and 3 with over 25 per cent infection. In 16 fields of C.P. 52-68 only a trace of infection was found in 6 fields; 2 had 1 to 2 per cent, 1 had 2 to 10 per cent, and 1 over 25 per cent.

Even though the disease is limited to a trace in most River parishes, except St. John and St. Charles, it could spread very rapidly within a few years because it is present generally throughout the area. As suggested for the Bayou Lafourche area, steps should be taken to control t disease by roguing in fields to used for seed in 1960.

### Mosaic in the Western (Teche Area

The disease was also found in three varieties in this area, howev the infection was limited to a tra In St. Mary Parish, 2 fields out of in C.P. 44-101 had a trace of mosa In 4 fields in Lafayette Parish a 2 in St. Martin Parish no disease w found in C.P. 44-101. A trace w found in N.Co. 310 in 2 fields in Mary and of a total of 6 fields su veyed in the other two parishes, were free of the disease. A trace the mosaic was found in one field St. Martin and 2 fields in St. Ma in the variety C.P. 52-68. A total 23 fields were checked in the Tec area and the disease was found li

d to a trace in 9 of these.

It would seem that now is the time control the disease in the Teche ea since it is confined to a trace the three parishes. By proper guing at this time, it may be pos- le to eliminate the disease from e area. This is particularly impor- nt in the Western area because of e limited number of varieties own and the good performance of Co. 310.

### Bunkie Area

No mosaic was found in the Bunkie ea.

Table 2 is a summary of the data owing the mosaic disease situation the state in 1959.

On a state basis, a trace of mosaic as found in 25.8, 29.0 and 46.5 per nt of the fields inspected of C.P. -101, N.Co. 310 and C.P. 52-68 re- ectively. A high percentage of the elds of N.Co. 310 were found with ore than a trace of the disease. his is probably due to the fact that mosaic spreads more rapidly in this variety than in the other two. It has also been shown to be more susceptible to the disease than either C.P. 44-101 or C.P. 52-68.

Studies conducted by Forbes and Steib(6) in 1959 have shown that if the level of infection is low in an area, even in a susceptible variety such as N.Co. 310, the spread of mosaic will be very slow. It was also found, that if fields of either C.P. 44-101 or C.P. 52-68, both of which are considered intermediate in resistance, are planted next to a field of N.Co. 310 heavily infected with mosaic, the disease will spread very rapidly in both varieties. It appears that N.Co. 310 serves as the source of the virus for the spread of the disease to other varieties. It would therefore seem wise to eliminate N. Co. 310 if it is heavily infected in areas where C.P. 44-101 is still free of mosaic and where C.P. 52-68 is being increased. If desired, N.Co.

**Table 2. A summary showing the mosaic disease situation in the two leading and one newly released sugarcane varieties in 13 parishes in 1959.**

| | Free | Trace | 1-2 % | 2-10 % | 10-25 % | Over 25% | Total |
|---|---|---|---|---|---|---|---|
| | | | Number of Fields Examined | | | | |
| | | | C.P. 44-101 | | | | |
| umber | 38 | 17 | 3 | 1 | 3 | 4 | 66 |
| of total | 57.6 | 25.8 | 4.5 | 1.5 | 4.5 | 6.0 | — |
| | | | N.Co. 310 | | | | |
| umber | 32 | 27 | 7 | 13 | 8 | 6 | 93 |
| of total | 34.4 | 29.0 | 7.5 | 14.0 | 8.6 | 6.4 | — |
| | | | C.P. 52-68 | | | | |
| umber | 17 | 20 | 4 | 1 | 1 | - | 43 |
| of total | 39.5 | 46.5 | 9.3 | 2.3 | 2.3 | - | — |
| tals | 87 | 64 | 14 | 15 | 12 | 10 | 202 |
| r cent | 43.1 | 31.7 | 6.9 | 7.0 | 6.0 | 5.0 | -- |

310 could be reintroduced free of the disease at a later date.

The survey made in 1959 shows that mosaic was present generally throughout the Bayou Lafourche and Mississippi River areas and was limited to a trace in the Western area. The disease was not found in the Bunkie area. The infection is so high on some farms in St. John, St. Charles and Lafourche parishes that the only way to bring it under control is to shift to resistant varieties or by the use of disease free seed cane. In Assumption Parish, the disease was much more widespread and serious in N.Co. 310 than in C.P. 44-101 and C.P. 52-68. It was limited to a trace in C.P. 44-101 and C.P. 52-68, with one exception where C.P. 44-101 was being grown next to some heavily infected N.Co. 310. Mosaic will become widespread in those four parishes within a few years and losses caused by the disease will become more apparent if it is not brought under control. A control program should be undertaken to keep the present commercial varieties free of mosaic because resistant varieties will not be available in time, through the "variety pipe line," to replace those which may have to be discarded because of the disease.

## Literature Cited


1. Anonymous. Recommendations for the control of mosaic disease in sugarcane in La. in 1959. Sug. Bul. 37 (14) :166. 1959.
2. Abbott, E. V. Strains of sugarcane mosaic virus in La. Sug. Bul. 37 (4) :49-51. 1958.
3. Abbott, E. V. Importance of mosaic in present commercial varieties of sugarcane in La. Sug. Bul. 37 (15) :179-181. 1959.
4. Abbott, E. V. Disease in relation to variety plantings in 1959. Sug. Bul. 37 (21) :272-273. 1959.
5. Forbes, I. L. and R. J. Steib. Sugarcane mosaic again on the increase — A warning. Sug. Bul. 37 (10) :122. 1959.
6. Forbes, I. L. and R. J. Steib. Spread in leading sugarcane varieties under field conditions in 1959. Sug. Bul. In Press. 1959.
7. Steib, R. J. Sugarcane mosaic on the increase. Report of Department of Plant Pathology. La. Agric. Ex Sta. for 1958. Report to the C tact Committee of the Amer. Sug cane League. March 1959.


—o—

## UP FRONT

(Continued from page 95)

estry Commission, State Capit Baton Rouge, Louisiana.

*Small Grains—*

B. J. Burch, Manager, Sontheim Dairy Farm, Hammond, Louisia

*Questions from the audience.*

12:05 P.M.—Luncheon

The Farm Forum group will tend the luncheon of the Membe Council of the Chamber of Co merce of the New Orleans Area.

John E. Jackson, Chairman of t Members' Council will preside.

The speaker will be L. L. Lov President, Louisiana Farm Bure Federation, Baton Rouge, Loui ana.

2:00 P.M.—General Assembly

Presiding Officer—O. "Dooley" Da son, Vice-Chairman, Southwi Farm Forum Advisory Committ Vice-President and Manager of A riculture Department, Bank of t Southwest, Houston, Texas.

PANEL—*"Let's Sell Our Way C of Surpluses"*

Panel Leader—

H. B. James, Director of Instr tion, School of Agriculture, No Carolina State College, Raleig North Carolina.

Panel Members:

*Dairy—*

Sam von Rosenberg, Americ Dairy Association, South Cent Regional Office, Austin, Tex

*Rice—*

Mrs. Dorothy Hutcheson, Ins tutional and Consumer Direct The Rice Industry, Houst Texas.

*Poultry—*

Paul Yount, Poultryman, Ag cultural Extension Service, St College, Mississippi.

*Cotton—*
Dr. Jerry Sayre, Manager, Long Staple Cotton Growers Assn., Greenwood, Mississippi.
*estions from the audience.*

FRIDAY, JANUARY 22

9:15 A.M.—General Assembly
esiding Officer—Gilbert J. Durbin, Vice-Chairman, Farm Forum Committee, Manager, American Sugar Cane League, New Orleans, Louisiana.
ANEL—*"Terminal Food Markets"*
nel Leader—
Emile L. Morvant, Member, Farm Forum Committee, Purchasing Agent-Treasurer, Southdown Sugars, Inc., New Orleans, Louisiana.
nel Members:
Vernon D. Northrup, President, Food Distribution Center, Inc., Philadelphia, Pennsylvania.
W. C. Crow, Chief, Transportation and Facilities, Agricultural Marketing Service, USDA, Washington, D. C.
Dr. Reid M. Grigsby, Specialist (Marketing), Agricultural Extension Service, Louisiana State University, Baton Rouge, Louisiana.
Julian Alford, Produce Merchandiser, Childs Big Chain, Shreveport, Louisiana.
*estions from the audience.*

12:15 P.M.—Luncheon
onsor—
Farm Credit Banks of New Orleans
Federal Land Bank of New Orleans
Federal Intermediate Credit Bank of New Orleans
Bank for Cooperatives
esiding—
A. J. Rhodes, Chairman, Farm Forum Committee, Area Development Assistant Manager, Louisiana Power & Light Company, New Orleans, Louisiana.
ldress—
Robert B. Tootell, Governor of the Farm Credit Administration, Washington, D. C.
osing of the Forum.


**Commercial Members**
**of the**
**AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC.**

**AMERICAN MOLASSES CO., OF LOUISIANA, INC.**
400 N. Gayoso St.
New Orleans, La.

**HARRY L. LAWS & CO., INC.**
126 Carondelet Street
New Orleans 12, La.

**THE HIBERNIA NATIONAL BANK**
New Orleans, La.

**LAMBORN & COMPANY, INC.**
Whitney Building
New Orleans, La.

**LEBOURGEOIS BROKERAGE CO.**
823 Perdido Street
New Orleans, La.

**THE NATIONAL BANK OF COMMERCE**
New Orleans, La.

**NATIONAL SUGAR REFINING CO.**
Carondelet Bldg.
New Orleans, La.

**PENICK & FORD LTD., INC.**
National Bank of Commerce Bldg.
New Orleans, La.

**ESSO STANDARD OIL COMPANY**
(Louisiana Division)
P. O. Box 1250 New Orleans 10, La.

**STANDARD SUPPLY & HARDWARE CO., INC.**
822 Tchoupitoulas St.
New Orleans, La.

**STATE AGRICULTURAL CREDIT CORP., INC.**
837 Whitney Building
New Orleans, La.

**WHITNEY NATIONAL BANK**
New Orleans, La.

# 3¾% interest

# on New U.S. Savings Bonds

## now in effect

*and the Bonds you already own are better than ever, too!*

Now U.S. Savings Bonds are a better buy than ever in three important ways:

- *All Series E and H Bonds bought since June 1, 1959, now earn 3¾% interest when held to maturity.*
- *Older Bonds will also pay more—an extra ½%, from June 1 on, if you hold them to maturity.*
- *All Series E Bonds, old or new, now carry an automatic extension privilege; they'll keep paying liberal interest for 10 years beyond maturity.*

Three big new *dollar* benefits that make it smart to buy new Bonds—and hang on to the ones you have!

**40 million Americans now own Bonds**

But a good return isn't the only reason so many people buy Bonds. They've discovered that there's no easier, safer, more *American* way to save.

You can buy Bonds automatically, through the Payroll Savings Plan where you work; you can buy them at your bank; your youngsters can even buy them at school, through the School Savings Plan for U.S. Savings Stamps.

The U.S. Government guarantees that the cash value of your Bonds cannot drop; it can only grow. And if your Bonds should be lost, stolen, or destroyed, the Treasury will replace them free.

Finally, every Bond you buy does a big job for America. Because today peace costs money—money for military strength and for science; and money saved by individuals to keep our economy sound.

Your Bonds help provide this money—help America keep the peace. So, to build a brighter future for yourself and your family—and to *protect* it—save with U.S. Savings Bonds. They're better than ever.

HELP STRENGTHEN AMERICA'S PEACE POWER

# SAVE WITH U.S. SAVINGS BONDS

*The U.S. Government does not pay for this advertising. The Treasury Department thanks The Advertising Council and this magazine for their patriotic donation.*

33.67
Su35
Chem
Chemistry Library,
Louisiana State University,
University, Station
Baton,Rouge,La. (3)

# THE SUGAR BULLETIN

38—No. 9 FEBRUARY 1, 1960

*ial Bulletin of the American Sugar Cane League of the U. S. A.*

PRINTED ON PAPER MADE FROM
LOUISIANA SUGAR CANE BAGASSE

## *In This Issue*

Up Front With The League ..... 107
**Raw Sugar Pricing Periods Ends—Technologists To Meet**

In The Field With Lloyd L. Lauden ..... 108
**Florida Tour**

In Washington With Joe Ferris ..... 109
**Don't Ask Me—Sugar Act Extension**

Spread Of Mosaic In Leading Sugarcane Varieties Under Field Conditions In 1959 ..... 110

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry

THE
# SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Editor

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

**Issued on the 1st and 15th of each month. Subscription: Member 50 cents a year. Non-Members $3.00 a year.**

**Washington Office, 510 Union Trust Bldg., Washington, D. C.**
**Josiah Ferris, Manager**

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
W. F. Giles, Jeanerette, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

# UP FRONT WITH THE LEAGUE

*by A. W. Dykers*

## Sugar Pricing Period Completed

The 1959-60 Louisiana Sugar Pric-g Period finished its weary course n January 28th and the average for ıe 16 week period, which began on ctober 8th, was 6.1819. It is inter-ting to note that this is less than ıe 1958-59 season's average price espite the fact that the season was month shorter this year. The aver-ge for the four weeks in January ıis year was 5.85 as compared with 1959 January average of 6.10. The ıw sugar market did not drop be-w 6 cents last year until Febru-y whereas this season the price raws, delivered New Orleans, ropped below 6 cents on December 4th and deteriorated steadily dur-ıg the rest of the pricing period.

The freight differential on a hun-red pounds of sugar between Cuba nd New York and Cuba and New rleans this season averaged 7.135 nts, which is the second highest ifference in freight on record. The iggest spread in the freight oc-ırred in the 1956-57 pricing period hen the average freight differen-al was 8.16 cents a hundred pounds. ast season (1958-59) the freight ifferential was 5.308 cents a hun-red weight.

The average difference in the eight charges between Cuba and ew York and Cuba and New Or-ans for the pricing periods during ıe past decade has been as follows:

| | | |
|---|---|---|
| 1949-50 season | 2.25 | cents |
| 1950-51 season | 2.68 | cents |
| 1951-52 season | 4.50 | cents |
| 1952-53 season | 4.438 | cents |
| 1953-54 season | 3.424 | cents |
| 1954-55 season | 4.56 | cents |
| 1955-56 season | 4.43 | cents |
| 1956-57 season | 8.16 | cents |
| 1957-58 season | 3.106 | cents |
| 1958-59 season | 5.308 | cents |
| 1959-60 season | 7.135 | cents |

## Technologists To Meet

The Annual Meeting of the American Society of Sugarcane Technologists will be held February 9th in the Agricultural Engineering Auditorium of Louisiana State University, Baton Rouge, La., beginning at 9 o'clock in the morning. The program will be as follows:

MANUFACTURING SECTION

*Morning Session*

Eimco Roto-Belt Filter.
by Mr. Charles Savoie, Lula Factory, Inc., Belle Rose, La.

Remote Control of Corliss Engine Governors.
by Mr. Victor Baillet, Caldwell Sugars, Inc., Thibodaux, La.

Evaporator Explosions.
by Dr. A. G. Keller, Chem. Engr. Dep't., L.S.U., Baton Rouge, La.

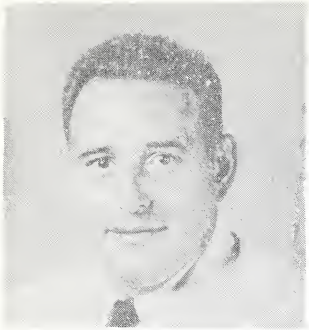
Flow Indicating Devices for Sugar Factories.
by Mr. Luis Suarez, Glenwood Cooperative, Inc., Napoleonville, La.

AGRICULTURAL SECTION

*Afternoon Session*

Standard of Cane Quality in Relation to Agronomic Research and Commercial Evaluation of Mill Cane.
by Dr. George Arceneaux, Director, International Research Service, Pass Christian, Mississippi.

(Continued on page 116)



# IN THE FIELD WITH LLOYD LAUDEN

*by Lloyd L. Lauden*

## Florida Tour

Twenty-nine representatives of the Louisiana sugar cane industry recently returned from a very interesting and informative visit to the United States Sugar Corporation at Clewiston, Florida and the U.S.D.A. Canal Point, Florida Cane Breeding Station. The group went by chartered Greyhound bus. The tour left New Orleans January 11 and returned January 16.

On the bus tour were Warren Harang, Jr., Lloyd Legendre, Irving E. Legendre, Jr., Howard A. Thibodeaux, Malcolm J. Lasseigne, H. K. Bubenzer, Leo Hebert, R. D. Breaux, E. S. Vabin, Malcolm Duhe, Nicholas Bergeron, F. P. Broussard, Harry Chris, James Graugnard, Kermit Coulon, Earl Gravois, W. J. Bernard, Jr., W. F. Guilbeau, Wallace Ellender, Jr., Daniel F. Jeffrey, Jr., Percy A. Robicheaux, Minus J. Granger, I. E. Granger, Elmo Broussard, Paul Voorhies, Gilbert J. Durbin and the writer. In addition, W. S. Chadwick joined the group at Clewiston.

The tour arrived at Clewiston on the night of January 12. The next day the management and staff of the United States Sugar Corporation conducted an excellent guided tour through the fields, factory, and work shop. The group had an opportunity to see the full field harvesting operations. This included seeing the continuous mechanical loader in operation, the large wheel type tractors each hauling four five-ton cane wagons from the fields, and the very rapid unloading of these units at a cane transfer station. In addition to seeing this operation, cultivating and weed control equipment was di played for the group.

The group was very much in pressed with the visit to the Unite States Sugar Corporation researc department. The Company does i own research work and develops i own varieties. It is really not nece sary to say their research progra is successful. U. S. Sugar Corpor tion will average more than 50 to of cane per acre and will produ more than one and one quarter mi lion tons of cane for this crop.

Of interest to the group was th visit to the Clewiston Sugarland Ca tle Ranch. Fine cattle grazing o good pasture were herded near th tour stops for the convenience of th group.

In addition to having seen the fu factory and field operations, the Lo isiana group had an opportunity t talk with most of the independe cane growers as well as represent tives of Okeelanta Sugar Compan the other sugar processing organiz tion of Florida, at a banquet give the Louisiana visitors.

The next day the group visited th U.S.D.A. Canal Point Cane Bree ing Station. The Canal Point St tion Staff did an excellent job showing the group, step by step, th intricate but large job of producin new varieties of cane for Louisian Of particular interest to the grou was the World Collection of Cane This is a collection of most of th canes of the world both wild an cultivated varieties. Some of thes have been used in the breeding

(Continued on page 115)

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*

### Don't Ask Me

Since my good friend Andrew Dyers saw fit to publish his version of "The Virus" in the January 15th issue of the *Bulletin* and mentioned that "Joe Ferris has it", I have been asked orally, in writing and via the telephone "How are you?"

So far I have tried to give a civil, friendly answer to all who inquired about my state of being, but my inherent inclination to be honest has finally gained the upper hand, so please don't ask. This is how I feel:

First, my head aches, I have a cold in it. My nose is running. My eyes water, and my throat is sore. My ears are roaring; a hive of bees has taken refuge, from the chilly temperature, in one of them and the "village blacksmith" is busily pounding his anvil in the other. The bees are the worst because they hum and buzz like crazy.

My left shoulder, dislocated in the late 20's by trying to drink corn from a five gallon demijohn hurts something terrible; my back aches too and I have more than a touch of fever. Cold chills chase the goose pimples up and down my spine. Going down the hill to the barn to feed my horses I fell and skinned my right knee and tore a hole in my best pair of pants. A horse stepped on my right big toe and mashed it flat. When I tried to climb up in the loft to throw down the hay I slipped and bumped my tail bone. Now it hurts to sit and it hurts to stand.

My purse is flatter than my empty stomach.

Although I am better now, please don't ask me how I feel; if you do I'll bite and I haven't had a rabies shot!

### Sugar Act Extension

Top administration officials have assured domestic sugar producers that the Sugar Act which expires next December 31st will be extended before Congress adjourns.

What to do about Cuba, where we buy approximately one-third of our sugar requirements, has been under consideration for the past several months ever since Castro showed his true colors and began his unwarranted and insulting attacks on the United States Government. While no official decision has been announced, it is reliably understood that the administration will ask Congress for

1. A four year extension to the Act.
2. Authority for the administrato to revise foreign quotas at will.
3. A swap under which mainland cane growers would get 50 thousand tons and domestic beet growers 150 thousand tons of Cuba's basic quota, and Cuba would get the right to fill all of Puerto Rica's deficit in the United States market, which for the past two years has averaged approximately 200,000 tons annually.

A number of bills have been introduced in Congress calling for a sizable cut in Cuba's quota in retaliation for Castro's expropriation of U. S. owned property in Cuba.

(Continued on page 113)

# SPREAD OF MOSAIC IN LEADING SUGARCANE VARIETIES UNDER FIELD CONDITIONS IN 195

*by I. L. Forbes and R. J. Steib*

At the present time mosaic is the most serious disease confronting the Louisiana Sugar Industry. This is because of the following pertinent facts: 1. The three leading commercial varieties, C.P. 44-101, N.Co. 310 and C.P. 52-68 are susceptible; 2. Mosaic is spreading rapidly in a number of areas of the sugar belt; and 3. There is no easy, practical method for controlling mosaic in seed cane, such as the heat treatment which is so effective in the control of ratoon stunting disease. Once a plant has mosaic, it and it's progeny will always have mosaic, with few exceptions. So, the only possible control for mosaic in susceptible sugarcane varieties is the use of mosaic-free seed cane. At the present time there is no certified seed program in the State through which a farmer could purchase mosaic-free seed cane for establishing seed plots. Therefore some planters are attempting to keep their own seed plots free from mosaic by roguing out mosaic plants throughout the growing season. But some of the important questions being asked the scientists by the farmers are: 1. How far will the mosaic spread from diseased to healthy cane in a field? 2. How rapidly does the mosaic spread during the growing season? 3. Is it possible to contr mosaic by roguing in seed plot 4. What is the relative susceptibili to infection among leading comme cial varieties?

In order to obtain informati that would answer one or all these questions, field plot expe ments were established at several l cations in the sugar "belt" in April 1959. Plots were selected in pla cane of several varieties. The fir counts were made during the latt part of April and were continu every two weeks until the first we in August. Eight plots, 50 feet lon located diagonally across the fie were staked off at each location f each variety. The total number plants in each plot and the numb with mosaic were determined eve two weeks. The results are given tabular form in Table 1.

This test was adjacent to N.C 310 and C.P. 52-68 (1st stubbl heavily infected with mosaic. T cane used for seed was rogued t previous year, however, it seems a parent that spread occurred in t seed cane after the last roguing b cause the primary shoots were 9 per cent mosaic diseased, as ind cated by the first count. The da showed mosaic increased until t

Location: St. John Parish (East side of Mississippi River)
Variety: C.P. 52-68

**Table 1. Spread of mosaic in plant cane of C.P. 52-68 in an area with adjacent field almost 100 per cent mosaic.**

| Date | No. Count | Total No. Shoots | No. with Mosaic | Per cent Mosaic | Mosaic Increase |
|---|---|---|---|---|---|
| April 18 | 1 | 703 | 65 | 9.2 | --- |
| May 11 | 2 | 790 | 97 | 12.3 | 3.1 |
| May 25 | 3 | 879 | 151 | 17.2 | 4.9 |
| June 5 | 4 | 1188 | 210 | 17.7 | .5 |
| June 22 | 5 | 2305 | 423 | 18.4 | .7 |
| July 6 | 6 | 2255 | 478 | 21.2 | 2.8 |
| Aug. 7 | 7 | 1858 | 475 | 25.6 | 4.4 |

**Note:** The increase in mosaic from April 18 to August 7 was 16.4 per cent.

rst week in June. The slight increase noted on June 5, was probly due to the increase in number June suckers. The mosaic began increase again the first week July, indicating that secondary read was occurring. A similar increase was noted in the count made vo weeks later. Counts were not ade after August 7th because of e height of the cane. *(Table 2)*

A trace of mosaic was found in e field selected for the test on pril 18th. The area in the immedie vicinity of the field selected was so relatively free of the disease. ne results of this test indicated that osaic spreads very slowly in an ea where mosaic is not very prevant. These results also show that e disease could be easily controlled roguing in such an area because condary spread would be negligible. *Table 3)*

As shown by the first count made on April 25th only a trace of mosaic was present in the plots. This also was true for the entire block and area in the immediate vicinity of the test. The highest percentage of mosaic was 1.3, recorded on July 8th. The increase in mosaic during the three month period was slightly over one per cent. These results also show that even in a susceptible variety like N.Co. 310, the amount of spread will be relatively small if the disease is not too prevalent in the immediate area, and that an effective roguing program could keep the disease under control in N.Co. 310 under such conditions. *(Table 4 and 5)*

The amount of mosaic found in C.P. 44-155 and C.P. 48-103 shows that they should no longer be considered resistant to mosaic, but should probably be placed in the moderately resistant class. Counts made from

Location: St. John Parish
Variety: C.P. 44-101

**Table 2. Spread of mosaic in plant cane of C.P. 44-101 in an area relatively free of the disease.**

| ate | No. Count | Total No. Shoots | No. with Mosaic | Per cent Mosaic | Mosaic Increase |
|---|---|---|---|---|---|
| pril 18 | 1 | 666 | 0 | — | — |
| ay 25 | 2 | 678 | 0 | — | — |
| ne 5 | 3 | 819 | 10 | 1.2 | — |
| ne 22 | 4 | 1900 | 11 | .6 | — |
| g. 7 | 5 | 1870 | 17 | .9 | — |

Note: The increase in mosaic from April 18 to August 7 was only .9 per cent.

Location: West Baton Rouge Parish
Variety: N.Co. 310

**Table 3. Spread of mosaic in plant cane of N.Co. 310 in an area relatively free of the disease.**

| ate | No. Count | Total No. Shoots | No. with Mosaic | Per cent Mosaic | Mosaic Increase |
|---|---|---|---|---|---|
| ril 25 | 1 | 1956 | 9 | 0.05 | — |
| y 9 | 2 | 2014 | 14 | 0.07 | — |
| y 27 | 3 | 2740 | 34 | 1.24 | 1.17 |
| ne 9 | 4 | 2543 | 29 | 1.14 | .10 |
| ne 24 | 5 | 2485 | 22 | .89 | -.25 |
| ly 8 | 6 | 1771 | 23 | 1.30 | .41 |
| g. 3 | 7 | 1887 | 24 | 1.27 | -.03 |

ote: The increase in mosaic from April 25 to August 3 was 1.2 per cent.

May 1 through July 21 indicate that mosaic spreads relatively slowly in varieties with some resistance to the disease if the inoculum in the area is relatively light.

Results of three tests given in Table 6, show the amount of mosaic rogued out of C.P. 52-68, C.P. 44-101 and N.Co. 310 every two weeks on a plantation in St. John Parish (East bank). When planted in the fall, the seed cane was free of mosaic, with the exception of about 2% in C.P. 52-68. The seed was planted in an area almost 100 per cent mosaic diseased. The purpose of these tests was to determine whether or not the three varieties could be kept free of the disease by roguing every two weeks. *(Table 6)*

From the results of the studies reported here, it is apparent that mosaic can be controlled in plant cane seed plots of C.P. 44-101 and C.P. 52-68 if the level of infection initially is relatively low; 2 per cent or less, even though mosaic infestation is high in field cane in the sa area. This is a point which we wo like to stress since many grow feel that it would be a losing fi to try to control mosaic by rogu in seed plots in an area alre heavily infested. Since we have fo that the infestation can be kept low 2 per cent by roguing in th two varieties, even under conditi of high infection in adjacent ca we recommend roguing in seed p and planting seed from the rog plots on a plantation scale. Of cou infection will occur in the crop gro from the rogued seed but it is kno that less damage to yield results fr such secondary infection than fr planting diseased seed cane.

Because of the rapid spread of m saic in N.Co. 310, in the same fi where spread was negligible in C 44-101 and C.P. 52-68, it would se advisable to discontinue N.Co. 3 in areas where the disease is c fined to that variety and later re troduce the variety free of mos

Location: St. John Parish (West side of river)
Varieties: C.P. 44-155 and C.P. 48-103

**Table 4. Spread of mosaic in plant cane of C.P. 44-155 which was isolated by fore fallow plowed land and a variety resistant to mosaic.**

| Date | No. Count | Total No. Shoots | No. with Mosaic | Per cent Mosaic | Mosai Increa |
|---|---|---|---|---|---|
| May 1 | 1 | 775 | 47 | 6.1 | --- |
| May 28 | 2 | 1433 | 87 | 6.1 | --- |
| June 11 | 3 | 1914 | 174 | 9.1 | 3.0 |
| June 26 | 4 | 1905 | 143 | 7.5 | -1.6 |
| July 7 | 5 | 1682 | 142 | 8.4 | .9 |
| July 21 | 6 | 1602 | 132 | 8.2 | - .2 |

**Note:** The increase in mosaic from May 1 to July 21 was 2.1 per cent.

**Table 5. Spread of mosaic in plant cane of C.P. 48-103 which was isolated by fores fallow plowed land and a variety resistant to mosaic.**

| Date | No. Count | Total No. Shoots | No. with Mosaic | Per cent Mosaic | Mosai Increa |
|---|---|---|---|---|---|
| May 1 | 1 | 598 | 23 | 3.8 | --- |
| May 28 | 2 | 1004 | 50 | 5.0 | 1.2 |
| June 11 | 3 | 1598 | 132 | 8.3 | 3.3 |
| June 26 | 4 | 1819 | 94 | 5.2 | -3.1 |
| July 7 | 5 | 1693 | 108 | 6.4 | 1.2 |
| July 21 | 6 | 1180 | 71 | 6.0 | - .4 |

**Note:** The increase in mosaic from May 1 to July 21 was 2.2 per cent.

is possible that mosaic-diseased Co. 310 is the virus reservoir from which C.P. 44-101 and possibly other important varieties become infected.

**able 6. Spread of mosaic in plant cane where diseased plants were rogued out every two weeks in an area with adjacent fields almost 100 per cent mosaic diseased.**

| ate | No. Count | Total No. Plants | Plants rogued out | |
|---|---|---|---|---|
| | | | Number | Per cent |
| | | C.P. 52-68 | | |
| ril 27 | 1 | 345 | 9 | 2.6 |
| y 11 | 2 | 332 | 0 | 0.0 |
| y 25 | 3 | 385 | 4 | 1.0 |
| ne 5 | 4 | 580 | 25 | 4.3 |
| ly 6 | 5 | 1098 | 10 | 0.9 |
| g. 7 | 6 | 927 | 17 | 1.8 |
| | | C.P. 44-101 | | |
| ril 27 | 1 | 548 | 13 | 2.4 |
| y 11 | 2 | 500 | 0 | 0.0 |
| y 25 | 3 | 550 | 2 | 0.4 |
| ne 5 | 4 | 681 | 3 | 0.4 |
| ly 6 | 5 | 1873 | 15 | 0.8 |
| g. 7 | 6 | 1456 | 11 | 0.7 |
| | | N.Co. 310 | | |
| ril 27 | 1 | 397 | 0 | 0.0 |
| y 11 | 2 | 344 | 1 | 0.2 |
| y 25 | 3 | 402 | 7 | 1.7 |
| ne 5 | 4 | 657 | 25 | 5.3 |
| ne 22 | 5 | 1889 | 130 | 6.9 |
| ly 6 | 6 | 1473 | 89 | 6.0 |
| g. 7 | 7 | 1388 | 77 | 5.5 |

## WASHINGTON

(Continued from page 109)

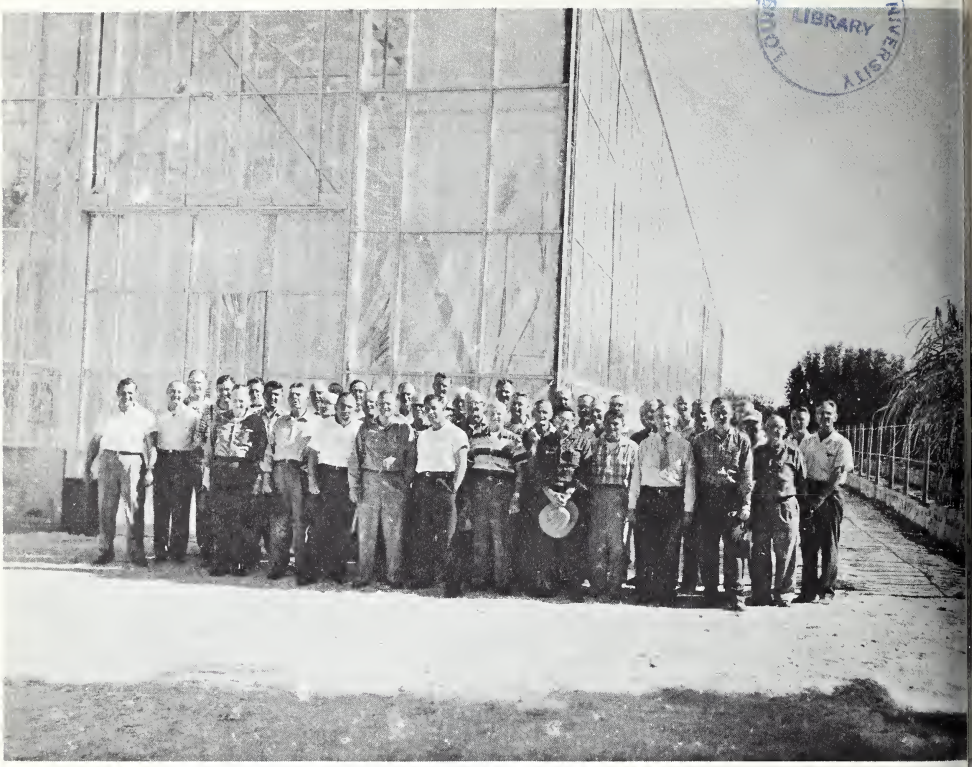
Administration officials say they not want to do anything to harm e Cuban people and a cut in Cuba's gar quota would do that. They stify their request for authority revise foreign quotas at will on e ground that the United States ay have to take such action to in- re adequate sources of sugar to eet U. S. requirements. They indi- te that the recent actions of Cas- o's government warrant a reap- aisal of Cuba's ability to continue pplying sugar to the United States a stable basis.

The latest and perhaps the most gnificant official effort to settle the Cuban sugar quota problem was taken this week by the House Agriculture Committee. The committee requested the Department of Agriculture to study and comment on a bill which would limit Cuba's sugar quota to 1959 levels.

The proposed bill would not reduce Cuba's quota of U. S. sugar imports, but would deprive that country of the increases it normally would enjoy because of the increased consumption in this country.

Representative Harold E. Cooley, Chairman of the House Agriculture Committee has expressed a strong opposition to any plan to grant the administration control of foreign sugar quotas. There could be a compromise in the making.

LIBRARY UNIVERSITY



**Group picture of Louisiana and Florida representatives standing in front of the Suga Cane Breeding House, Canal Point, Florida.**

**Continuous Mechanical Cane Loader and 5 ton cane wagons used in Florida.**

r. Carl Grassl, Dr. Dick Breaux and Mr. Preston Dunckelman inspecting one of the wild species of cane.

## THE FIELD

(Continued from page 108)

Louisiana canes. More work is ng done in this direction today. this collection are very tiny small rrel canes as well as large barrel nt canes. Growers were also sur- sed to see C.P. 48-103, C.P. 44-101, d other Louisiana varieties grow- 15 feet tall in giant stools.

Several Louisiana representatives o went on the tour have written ters to the League regarding the p.

From Mr. Percy Robicheaux, St. ry Parish, "My sincere thanks d appreciation for the enjoyable, asant, and informative trip; my y regret is that too many farmers ssed an opportunity of a life time."

From Mr. Earl Gravois, Terre- nne Parish, "I had always wanted see the cane operation in Florida d this was an opportunity that no man in Louisiana should have missed. One doesn't really appreciate the seedling work being done at Canal Point until he sees it. This, tied in with the work the League and the men at our Experiment Stations are doing, is really the life line of the sugar cane industry. I'm sure this work is not as fully appreciated by the cane people of Louisiana as it should be."

From Mr. James Graugnard, St. James Parish, "I was very much impressed by the caliber of men working at Canal Point and the interest they have in their work. I am also much more aware of the type of work that is going on and the problems these men have in trying to get us a new variety with all the good features we want in it. The basic or pioneer research work that is being done was new to me. I am sure if each farmer in Louisiana had the

chance I just had to see Canal Point and visit with its research men, they could better understand the problems involved."

The group was especially fortunate to have as its bus driver Mr. Francis Gravois of Vacherie, La. Mr. Gravois' courteous attention and excellent driving ability lent much to the success of the tour.

———o———

## UP FRONT

(Continued from page 107)

Agricultural Significance of Deposition Along the Mississippi River.

by Dr. John Van, Geology Dep't., L.S.U., Baton Rouge, La.

Studies on the Mosaic Problem in Louisiana.

by Dr. E. V. Abbott, U.S.D.A., Houma, La.

Mr. Lawrence Myers, Director of the Sugar Division, Commodity Stabilization Service, U. S. Department of Agriculture, is scheduled to be the guest speaker. The new officers for 1960 will also be presented.

*"Sugar Factory Insurance Specialists"*

**GILLIS, HULSE and COLCOCK, Inc.**

839 Union St. New Orleans, La.

Telephone JA 2-1225

**Commercial Members of the AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC**

AMERICAN MOLASSES CO., OF LOUISIANA, INC.
400 N. Gayoso St.
New Orleans, La.

HARRY L. LAWS & CO., INC.
126 Carondelet Street
New Orleans 12, La.

THE HIBERNIA NATIONAL BANK
New Orleans, La.

LAMBORN & COMPANY, INC.
Whitney Building
New Orleans, La.

LEBOURGEOIS BROKERAGE CO.
823 Perdido Street
New Orleans, La.

THE NATIONAL BANK OF COMMERCE
New Orleans, La.

NATIONAL SUGAR REFINING CO
Carondelet Bldg.
New Orleans, La.

PENICK & FORD LTD., INC.
National Bank of Commerce Bldg.
New Orleans, La.

ESSO STANDARD OIL COMPANY
(Louisiana Division)
P. O. Box 1250 New Orleans 10, L

STANDARD SUPPLY & HARDWAR CO., INC.
822 Tchoupitoulas St.
New Orleans, La.

STATE AGRICULTURAL CREDIT CORP., INC.
837 Whitney Building
New Orleans, La.

WHITNEY NATIONAL BANK
New Orleans, La.

Chemistry Library,
Louisiana State University,
University, Station
Baton Rouge, La. (5)

# THE SUGAR BULLETIN

38—No. 10 FEBRUARY 15, 1960

*ial Bulletin of the American Sugar Cane League of the U. S. A.*

PRINTED ON PAPER MADE FROM
LOUISIANA SUGAR CANE BAGASSE

## *In This Issue*

Up Front With The League ..... 119
**Lauden Heads Technologists—Mr. Meyers Speaks—SAAC Elects—Henderson Moving—Short Course**

In The Field With Lloyd L. Lauden ..... 120
**County Agents Meeting**

In Washington With Joe Ferris ..... 121
**Frank A. Kemp, Sugar Man of the Year—Sugar Act of 1960**

Recommendations For Johnson Grass And Weed And Grass Control in Sugarcane—1960 ..... 122

Roguing Mosaic Infected Stools Of Sugarcane With A Chemically Fortified Petroleum Solvent ..... 127

Preliminary Report On The 1959 Louisiana Sugar Crop ..... 125

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry

THE SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Edit

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

Issued on the 1st and 15th of each month. Subscription: Member 50 cents a year. Non-Members $3.00 a year.

Washington Office, 510 Union Trust Bldg., Washington, D. C.
Josiah Ferris, Manager

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
W. F. Giles, Jeanerette, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

# UP FRONT WITH THE LEAGUE

*by A. W. Dykers*

### Lauden Heads Technologists

It is with pride and pleasure that report the election of our good end and co-worker, Lloyd L. Lau-n, as President of the American ciety of Sugar Cane Technologists. oyd is the Agronomist and Field presentative of the American Sug- Cane League. He has been with e League since April 16, 1952 and s done a very fine job in publiciz- the latest developments in the t of growing sugar cane in Louisi-a as advocated by the scientists the United States Department of riculture and Louisiana State Uni-rsity. The fact that Lloyd now ads the American Society of Sug- Cane Technologists is proof posi-e of the esteem in which he is ld by his associates in the Tech-logy field.

The annual meeting of the Society as held in Baton Rouge on Febru-y 9th. Other officers elected were mes H. Thibaut, Donaldsonville, Vice-President; Eugene Graug-rd, St. James, 2nd Vice-President; ster G. Davidson, Houma, Secre-y-Treasurer; Leo P. Hebert, Hou-a, Chairman of the Agricultural ction; Joseph N. Foret, Jr., Su-eme, Chairman of the Manufac-ring Section; and Frank L. Bar-r, Jr., Lockport, Chairman at rge. To all these gentlemen we tend our heartiest congratulations.

### Mr. Myers Speaks

The guest speaker at the Society's nquet was the Honorable Lawrence yers, Director of the Sugar Divi-on of the U. S. Department of Agri-lture.

The writer did not attend the banquet and did not hear Mr. Myers speak. We understand, however, that he again expounded his belief that it is impossible to divorce the world sugar market from the domestic sugar market. We are told that he left the definite impression that he had no intention of taking steps to improve the price of sugar. We are told that he stressed increased efficiency as being the only road open to our industry if we hope to continue in operation, and that he called attention to the fact that the number of cane farms in Louisiana had decreased from 11,000 in 1937 to about 3,000 today.

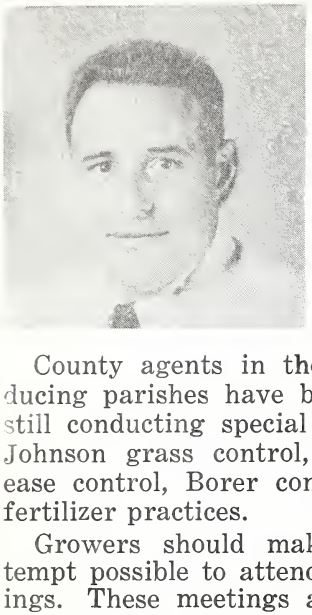
Personally we do not think the Sugar Act was passed by Congress to put cane farmers out of business. The fact that thousands of growers have found it impossible to make a living under the administration of the Sugar Act, to us, is far from complimentary.

### SAAC Elects

The Annual Meeting of the State Agricultural Credit Corporation, Inc., was held in New Orleans on January 29th and Lester C. Gerard, President, reported to the stockholders that $1,430,113.61 had been loaned to 127 farmers during the year to plant and cultivate 27,853 acres of sugar cane, to purchase farming equipment, and for cattle loans. The stock dividend for 1959 amounted to $2.25 a share.

Elected members of the Board of Directors at the meeting were E. J. Beaullieu, Jeanerette, J. J. Munson,

(Continued on page 130)



# IN THE FIELD WITH LLOYD LAUDE

*by Lloyd L. Lauden*

## County Agents Holding Meetings

County agents in the sugar producing parishes have been, and are still conducting special meetings on Johnson grass control, Mosaic disease control, Borer control, and on fertilizer practices.

Growers should make every attempt possible to attend these meetings. These meetings are most important. County agents usually invite one or more of the scientists of L.S.U. and the U.S.D.A. to these meetings to give reports and answer questions. There is always plenty of time for questions and answer sessions. Hear first hand reports on research from the men doing the work. Ask questions of these men. Discuss the problems involved. Through these discussions new research can be encouraged and inspired.

Because production cost continues to rise from year to year, and the price of sugar remains about the same, growers must increase cane production per acre if they are to survive this cost-price squeeze period. Although cane growers in general are doing a good job of farming now, a better job must be done in the future to increase production per acre. This will not be easy to do, but if growers decide now that this must be done, progress will be made.

To increase cane production per acre growers must decide to farm to the best of their ability each day and make use of all the know-how and skill that can be mustered. In addition to this, growers should take full advantage of the latest inform tion on grass control, borer contr disease control, and other recomme dations of the Experiment Statio

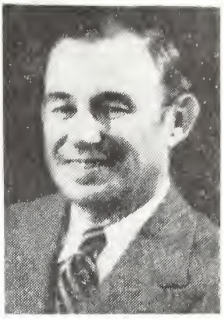
It is well to point out that ea operation in the cultivation of crop, whether small or large, is i portant No single practice, rega less of how well done, will insu maximum yields. It is the combi tion of the many practices added gether that determines yields. Doi each one well is the best insura of a good crop.

It is also of importance to po out that the little things add Growers can remind workers to p special attention to the ends of ro when fertilizing and cultivati There is a considerable amount acreage in cane between quart drains and headlands on most farn To improperly handle this cane w reduce overall yield per acre. Che the setting tools several times duri the day, and when tools are mov from one soil type to another. Gro ers should pay extra special att tion to tool settings during late c tivation. Root cutting is never go It retards growth and will redu yields.

Mosaic disease is spreading. Gro ers should plan their rogueing p gram early. Attend the Cour Agent's meetings to learn how control this disease as well as get information on many other i portant matters.

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*



## Frank A. Kemp Sugar Man of the Year

Frank A. Kemp of The Great estern Sugar Company, Denver, lorado, received the Dyer citation "Sugar Man of 1959." The cita- n was made at a luncheon at India use in New York City, February h. A silver bowl and citation were esented to Mr. Kemp, and the cita- n reads as follows:

"Citation for Significant and Meritorious service to the Sugar Industry.

"The discerning mind and eloquent tongue of Mr. Kemp have gained the respect of the local, national and international segments of the sugar industry.

"The key to Mr. Kemp's qualifications, however, has been his unusual ability to gain the confidence of all domestic sugar-producing areas and to lead them in united action.

"Through his experienced and thoughtful resourcefulness, Mr. Kemp has been able to persuade diverging sugar-industry opinions to reach many significant decisions."

Mr. Kemp was born in Wyoming nd received his law degree from the niversity of Colorado. He joined ie Great Western Sugar Company 1923, and he has been president that company for nearly twenty- ve years.

He is the past president of the . S. Beet Sugar Association; he as been industry advisor to the nited States Delegation at conferences on the International Sugar Agreement held at London and Geneva; spokesman for the beet sugar industry as well as other domestic sugar-producing interests before various committees of the United States Congress.

In addition to operating the Great Western Sugar Company, the largest beet sugar producers in the United States, Mr. Kemp is active in numerous other business and civic organizations.

The "Sugar Man of the Year" award was established as a memorial to the late B. W. Dyer, Sr., founder of B. W. Dyer & Company, Sugar Economists and Brokers of New York City. The annual award is to give recognition to persons making significant or meritorious contributions to the sugar industry of the United States.

The judges who selected Mr. Kemp as 1959 winner, were: Robert H. Shields of Washington, D. C., President and General Counsel of the U. S. Beet Sugar Association; Donald Maclean of San Francisco, California, President of the California-Hawaiian Sugar Refining Corporation, and W. C. Kemper, of New Orleans, Louisiana, President of Southdown, Inc.

## Sugar Act of 1960

The provisions of a Sugar Act of 1960 have been agreed upon. The announcement was made by spokesmen for Agriculture and State Departments at a meeting held in Washington, D. C. February 10th, when the government's legislative plan was

(Continued on page 131)

# RECOMMENDATIONS FOR JOHNSON GRASS AND WEED AND GRASS CONTROL IN SUGARCANE -- 19

*Ernest R. Stamper, Louisiana Agricultural Experiment Station*
*Department of Plant Pathology*

The use of chemicals as herbicides for weed and grass control in sugarcane fields has become a general practice in Louisiana. In the past few years, research has emphasized the need for more efficient timing in the application of the chemicals recommended for use. Johnson grass has been the most pressing weed problem and emphasis has been placed on the control of this pest rather than on other weed problems.

## Johnson Grass Control

Where fields are infested with Johnson grass there is no known substitute for fallow plowing to kill the large plants and rhizomes from the preceding stubble crop. The six to eight thorough plowings required also aid in germinating the grass seed remaining in the soil from the Johnson grass in the previous stubble crop. Sugarcane should not be planted behind corn grown the same year, where the corn was heavily infested with Johnson grass rhizomes and Johnson grass seed.

## Plant Cane

Most Johnson grass plants produce seed but not all plants produce viable seed. Where fallow plowing has been done during several cycles of sugarcane, nearly all plants in the sugarcane fields produce Johnson grass seed that will germinate and produce mature plants. In such areas a chemical control program is essential to prevent reinfestation of the plant cane by Johnson grass seedlings.

Johnson grass seed are known to remain viable in the soil for several years if they are at depths greater than three inches in the soil. When these seed are brought near the surface of the soil, and soil moisture and temperatures are favorable they will germinate and produce seedlings.

*Fall Treatments:* (For cane planted August 1 to October 15.

1. Roll or pack tops of rows af planting and covering the cane.

2. Apply 1 pound acid equival (1 quart) of the amine salt of 2,4 on a band 36 inches wide on t of the row.

3. Approximately 2 to 3 wee later, or after a rain, apply 4 to pounds of sodium TCA per ac The rate per acre will depend on t number of Johnson grass seedlin which have escaped the first sprayi with 2,4-D.

4. Cultivate the middles and sid of rows as needed.

5. Roguing to remove Johns grass plants coming from rhizom or surviving the treatment is reco mended.

6. *Do not* apply Dalapon on a variety of cane in the fall of t year.

*Spring Treatments:*

Two methods of treatment of pla cane are suggested. Either of t methods has been effective if pro erly applied at the correct time.

1. *Shaved plant cane.* If the pla cane is shaved and off-barring done before grass and weed se germinate, apply 4 pounds of TC plus 1 pound (1 quart) of 2,4- amine per acre.

2. Apply either of the followi immediately following fertilizati as a second treatment:

a) 4 pounds of TCA plus pound 2,4-D per acre on the dri

b) 2 pounds of TCA plus pound Dalapon plus 1 pound 2,4- mixed and applied at the sar time—per acre on the drill.

## Alternate Method of Treatment- Plant Cane

1. If plant cane is not shaved if it is shaved several weeks befo off-barring and grass seed have ge minated apply:

a) 2 pounds TCA plus 1 pound of alapon plus 1 pound of 2,4-D. (Usuly applied in March).

b) After the cane is fertilized isually in May) apply the same rate materials (2 pounds TCA plus 1 ound Dalapon plus 1 pound 2,4-D) all varieties as a second treatent.

c) Under extremely brassy contions where the weather prevented e second application at the proper me apply 2 pounds of Dalapon plus pound of 2,4-D as a directed spray. properly direct the spray in plant ne or stubble, close off the center ozzle and adjust the boom and two tside nozzles for each row so that e spray will cover the tops of the asses at the base of the sugarcane alks. This spray application cant be done until the cane is high ough to direct the nozzles to disarge the spray at the base of the ne Usually this application is ade about the middle of May.

Rogue Johnson grass plants missed the spray operation.

Control tievines either by applyg 2 pounds of 2,4-D (blanket) per re after layby with the sprayer or an airplane spray in late July August using from 3/4 to 1 pound amine 2,4-D per acre. One of ese applications is suggested for th plant and stubble sugarcane.

### Stubble Cane

Stubble cane that is infested with hnson grass and is not shaved or the stubble cane is shaved and offarring is delayed and the grass is rowing:

Apply per acre:
- 7 pounds TCA
- 2 pounds Dalapon
- 1 pound 2,4-D

se a sprayer equipped with three ozzles on each row spraying over th the grass and the sugarcane at e time of, or immediately followg fertilization. Best results have een obtained when the grass is not ver 10 inches tall and is actively rowing. This method can be used n all varieties of stubble cane without serious injury to the yields in tons per acre and sugar per ton of cane.

### Alternate Method on Stubble Cane Shaved Stubble Only

If the stubble cane is shaved and off-barring is done 1 or 2 days after shaving apply 11 pounds of TCA plus 1 pound of 2,4-D immediately following the off-barring. Use three nozzles per row with the two side nozzles adjusted so that the spray pattern covers the sides of the drill and the top of the off-bar.

This application of TCA is more effective if it rains than if in dry cold weather. The shaving, off-barring and application is not as effective if done too early and should be done in late February or early March.

If after the application of 11 pounds of TCA Johnson grass is still a problem, varieties C.P. 36-105 and C.P. 44-101 only may be sprayed with 4 pounds of Dalapon, directing the spray if possible, as suggested for plant cane.

### Where Johnson Grass Is Not A Problem

In areas where Johnson grass is not a problem but annual weeds and grasses are the main problem two methods are suggested:

1.—a) If the sugarcane (plant or stubble cane) is shaved apply 1 pound of 2,4-D on the drill *after off-barring.*

b) After the cane (plant of stubble) is fertilized apply 2 pounds TCA plus 1 pound of Dalapon plus 1 pound of 2,4-D on the drill per acre. This should be a directed spray if the cane is high enough to do so.

2.—a) If the cane (plant or stubble) is *not shaved* apply 1 pound of 2,4-D before off-barring.

b) After the cane (plant or stubble) is fertilized apply either:

1. 2 pounds TCA plus 1 pound Dalapon plus 1 pound 2,4-D on the drill.
2. *Or* 2 pounds Dalapon plus 1 pound 2,4-D.

With either of the two methods the spray should be directed cover-

ing the grass and base of the sugarcane stalks.

If Bermuda grass (blue or wire grass) is a problem two applications of the 2 pounds TCA plus 1 pound of Dalapon plus 1 pound 2,4-D should give good results. One application of 2 pounds of Dalapon plus 1 pound of 2,4-D as directed spray is also effective if the Bermuda grass is growing.

### General Statements That Will Aid In Chemical Weed Control In Sugarcane

1. Some varieties of sugarcane are seriously damaged by Dalapon. These varieties in order of their intolerance are: C.P. 47-193, 43-47, 48-103, N.Co. 310, C.P. 52-68, 44-155, and 36-13. The injury from Dalapon is more pronounced in dry seasons than in seasons of heavy rainfall.

2. C.P. 36-105 and C.P. 44-101 are the only commercial varieties that will tolerate 4 pounds of Dalapon, the amount required to effectively kill Johnson grass from rhizomes.

3. Fan shaped nozzle tips have given better results in the application of chemical herbicides than have cone shaped nozzles.

4. Spray equipment should be carefully checked and in good operating condition before chemicals are put into the tank. Nozzle tips should be replaced as needed (about every third year, depending on the amount of material that has gone through them). All nozzle tips should be of the same size and make, with filters in the flow line and in each nozzle.

5. Use a good tractor with an operating governor and a good tractor driver. Make sure each sprayer has an operating by-pass pressure regulating valve equipped with a good pressure gauge.

6. A minimum of 12 gallons of water per acre should be used with TCA or Dalapon. For spray applications of 2,4-D alone less than 12 gallons of water may be used. Wettable powders such as C.M.U. should be applied in a minimum of 20 g lons of water per acre.

7. When several chemicals are be used together in the same ta such as TCA, 2,4-D and Dalap the following should be done. T sprayer tank or mixing tank sho be filled 2/3 to 3/4 full with wa before any herbicide is put in t tank. The pump should be runni as chemicals are added. It is des able to dissolve TCA outside t sprayer before it is placed in t tank. Put the 2,4-D in first, th add the TCA, and then afterwar Dalapon if it is used. Each chemi should be added to the water in t mixing tank separately.

8. *Never* mix two or more cher cals together in the bottom of t tank or in low volumes of wat outside the tank.

9. *Do not* try to apply drill app cations of TCA or Dalapon on mo than 3 rows at one time. The t outside clusters of nozzles should adjustable to take care of differe row widths.

10. A tank of the same or larg capacity than the field sprayers, ce trally located at a source of go water and accessible to electrical cu rent for agitation has proven to an asset in mixing chemicals. Th tank should be located high enou that the field sprayer can be load from the bottom or side. If the ta is located on the ground there shou be a large volume pump to fill t field sprayer.

### Plants Resistant To 2,4-D

Some plants such as "Wild le tuce," "Chicory," "Night Shade and some species of Dock are n killed by spray applications of 2,4-D These plants are effectively killed b spraying with 1 pound per acre Silvex (2,4,5,T-P) and is on the ma ket as Kuron, Propon 4, 2,4,5,T-P ar possibly other tradenames.

Wild lettuce should be sprayed i the spring when it is about 10 inch tall. A second application may b

# PRELIMINARY REPORT ON THE 1959 LOUISIANA SUGAR CROP

*By W. M. Grayson, La. ASC State Office*

The 1959 Louisiana sugarcane crop has turned out to be rather disappointing but unique in many respects. The 1959 Proportionate Share Determination for the Mainland Cane Sugar Area increased the allowable acreage for sugar and seed by 10% above that of the 1958 crop, and on March 4, 1959 all restrictions were lifted except that planting after that date was prohibited. At that time many planters had not plowed out the stubble cane that normally would have been pdowed out if the original determination had remained in effect. Therefore, the anticipated acreage for harvest was increased to about 113% of 1958.

During the summer various estimates indicated a record crop of both sugarcane and sugar. Estimates of sugar production varied from about 490,000 short tons, raw value, to as high as 520,000 tons. It later developed that excessive rains in some areas prevented the proper "laying-by" of the crop and borers caused considerable damage in others. Also, mosaic disease appeared in many varieties of cane planted east of the Atchafalaya River which naturally reduced the yield per acre.

To add fuel to the already glowing flames, freezes in early and mid-le November made selective harvesting the order of the day. It appeared to be the only way of preventing a disaster and much credit must be given to research workers, the American Sugarcane League, mill management, producers and others interested in the welfare of the industry who realized that a near crisis was impending and heroic measures were necessary. Because of this procedure, much tonnage was therefore necessarily lost by severe topping back of sour joints. This was the only way possible to keep the mills going and that is exactly what happened. Not a single mill, not even one farthest north was forced to close down because of sour cane.

At the beginning of the crop the total planted acreage for sugar and seed was estimated at 268,000 compared to the actual acreage harvested in 1958 of 239,490. This represented an increase of 11.9% over the previous year. Of this total 247,000 was indicated for sugar and 21,000 for seed. There may have been some abandonment because of the freeze, the extent of which is not now known, but is estimated at about 3,000 acres, leaving 244,000 acres harvested for sugar alone. With 5,073,000 net tons of cane ground for sugar during the 1959 crop, the probable yield per acre was about 20.5 tons compared to 22.2 tons in 1958.

The 5,073,000 tons of cane ground compared to 4,869,000 in 1958 represents an increase of 4%. The total sugar produced was 440,400 short tons, raw value, compared to 442,-793 tons in 1958. This represents a

(Continued on next page)

---

necessary under some conditions. This material does not injure sugarcane at the suggested rate.

### Spot Treatment

Small localized infestations of Johnson grass can be killed by spraying the individual stools of Johnson grass with one of the following solutions:

A. 1 to 1-1/2 pounds of sodium chlorate plus 1/2 to 3/4 pound of calcium chloride per gallon of water.

B. 1/2 pound of TCA plus 1/4 pound of Dalapon per gallon of water.

It is necessary that the Johnson grass plants be covered and completely wet with either solution.

decrease of 0.5%. Actual yield of sugar per net ton of cane ground in 1959 was 173.6 pounds, raw value, compared to 181.9 pounds in 1958, a reduction of 8.3 pounds or 4.6%.

The trash content of the 1959 crop of sugarcane was 6.7% compared to 6.5% in 1958, an exceptionally dry year for harvesting. This would appear to be lower than expected for 1959 but when the large amount of the top cane sacrificed from topping back sour join is taken into account it is not out line. If anything the figure shou be lower but due to many wet da during the 1959 harvest, prop burning in the field was impossib

The simple average Normal Jui Sucrose and Purity was 12.23 a 77.15 compared to 12.85 and 77. in 1958. This was not bad und the circumstances. Of the 440,4 tons of sugar produced about 36,0 was in the form of refined, 6,400

**Comparison of Sugarcane Ground and Sugar Produced In 1958 and 1959 Louisiana Crops By Parishes and Groups**

| Name of Parish or Group | 1959 Tons Cane | 1959 Tons Sugar | 1958 Tons Cane | 1958 Tons Sugar | % Increase or Decrease Cane | % Increase or Decrease Sugar |
|---|---|---|---|---|---|---|
| Ascension | 234,393 | 20,989 | 226,390 | 20,552 | 5.5 | 2.1 |
| Assumption | 577,360 | 51,544 | 605,039 | 54,917 | (9.5) | (9.4) |
| Iberia | 480,567 | 41,624 | 430,627 | 40,303 | 11.6 | 10.3 |
| Iberville | 273,989 | 19,485 | 293,236 | 21,776 | (6.6) | (10.5) |
| Lafayette | 164,352 | 13,122 | 135,757 | 11,312 | 21.1 | 16.0 |
| Lafourche | 825,359 | 73,118 | 870,043 | 83,512 | (5.1) | (12.4) |
| Pointe Coupee | 108,103 | 8,438 | 86,509 | 7,324 | 25.0 | 15.2 |
| Rapides | 77,448 | 6,013 | 58,622 | 4,905 | 32.1 | 22.6 |
| St. James | 345,891 | 29,449 | 341,820 | 32,298 | 1.2 | (8.8) |
| St. John 1/ | 91,256 | 4,413 | 162,785 | 11,313 | (43.9) | (61.0) |
| St. Martin | 255,469 | 21,952 | 218,400 | 19,755 | 17.0 | 11.1 |
| St. Mary | 878,731 | 86,641 | 719,813 | 69,721 | 22.1 | 24.3 |
| Terrebonne | 286,475 | 25,649 | 287,582 | 27,803 | (0.4) | (7.8) |
| Vermilion | 57,165 | 4,654 | 62,903 | 5,535 | (9.1) | (15.9) |
| W. Baton Rouge | 367,333 | 29,955 | 324,936 | 29,059 | 13.0 | 3.1 |
| West Feliciana | 47,497 | 3,273 | 43,249 | 3,131 | 9.8 | 4.5 |
| Group | | | | | | |
| Miss. River | 1,469,685 | 116,082 | 1,479,932 | 125,529 | (0.7) | (7.5) |
| Bayou Lafourche | 1,689,194 | 150,311 | 1,762,664 | 166,233 | (4.2) | (9.6) |
| W. Atchafalaya | 1,913,732 | 174,007 | 1,626,122 | 151,031 | 15.0 | 15.2 |
| Totals | 5,072,611 | 440,400 | 4,868,718 | 442,793 | 4.2 | (0.5) |

[1] Reserve did not operate in 1959

# OGUING MOSAIC INFECTED STOOLS OF SUGARCANE WITH A CHEMICALLY FORTIFIED PETROLEUM SOLVENT

*by Ernest R. Stamper and Louis Anzalone*
*Louisiana Agricultural Experimental Station*

Mosaic infestation in sugarcane in eas of Louisiana has been increasg for the past several years. The ethod used in roguing infected ools is rather expensive and diffilt. Studies were begun in the ring of 1959 to look for chemicals that would completely kill stools of sugarcane, prevent resprouting and not seriously affect adjoining stools of sugarcane.

Because of previous experience with the oils when tested for their

(Continued on next page)

antation granulated, 38,000 in turnados and about 360,000 in raw igar. In addition sugar mills proiced 1,218,000 gallons of sirup om 52,000 tons of cane. This was ot included in the total cane ground r sugar. There was produced 473,000 gallons of first molasses id 1,240,000 gallons of second mosses. Blackstrap molasses producon amounted to 32,000,000 gallons 80° Brix.

On the basis of the 244,000 acres timated as ground for sugar, the eld of sugar per acre was 1.8 tons. his compares with 2.0 tons per acre 1958 and 1.75 tons in 1957.

If we divide the sugar district to three groups such as the Mississippi River, Bayou Lafourche and est of the Atchafalaya River we nd that each suffered to some exnt from the effects of the freeze id other adverse conditions. Some arishes fared worse than others in ie same group; however, the Bayou afourche area appears to have been arder hit than either one of the hers, the Mississippi River somehat less, and West of the Atchafaya hardly at all. Comparing 1959 ith 1958 the River section ground 7% less cane and produced 7.5% ss sugar. The Bayou area mills ound 4.2% less cane and produced 6% less sugar. On the other hand, ills West of the Atchafalaya ground 37,610 tons of cane more in 1959 an in 1958 and produced 22,980 ore tons of sugar. This, percentgewise, shows a 15.0% increase in igar produced.

A survey of parishes (Exhibit A attached) giving a comparison of cane ground and sugar produced in 1958 and 1959 shows that the largest decrease due to adverse weather occurred in Assumption Parish. This parish ground 9.5% less cane and produced 9.4% less sugar. Actually, St. John had the largest decrease but this was due to Reserve not grinding in 1959.

The largest increase in parishes having more than one mill occurred in St. Mary Parish. This Parish showed an increase of 22.1% in tonnage ground and 24.3% more sugar produced. The second parish was St. Martin with 17.0% and 11.1% respectively. Iberia followed with increases of 11.6% and 10.3%, respectively.

Had the sugarcane originally estimated at the beginning of the crop been ground there would have been about 5,370,000 tons harvested and even with the low yield of 173.6 pounds of sugar per ton there would have been produced about 466,000 tons of sugar. It may therefore be said that over 300,000 tons of cane, about 6%, were left in the field due to topping back sour joints.

It is rather remarkable and certainly a tribute to the new varieties of sugarcane so painstakingly developed and released by the scientists and their co-workers in the Mainland Cane Area that sugar was still being made, seemingly without too many problems, six weeks after two killing freezes.

herbicidal effectiveness in sugarcane for grass and weed control, tractor fuel or diesel oil was selected as a carrier for the chemicals tested. Earlier experience had shown that these products were extremely toxic to young shoots of sugarcane. Even though they are known to be toxic and kill young cane shoots the stubble or base of plant cane will resprout and continue to grow.

The petroleum solvents have been fortified with chemicals such as pentachlorophenol, ester formulations of 2,4-D, 2,4,5-T and 2,4,5,T-P and applied to sugarcane for grass control at low rates, without seriously injuring sugarcane.

Two chemicals that are relatively new in the trade were selected for testing in 1959, these were:

Garlon — Containing 4 pounds of dalapon and ½ pound of silvex per gallon, formulated as the ester of each material.

Fenac — The ester of 2,3,6 trichlorophenylacetic acid containing 1½ pound per gallon.

A block of stubble cane, C.P. 44-101 that was to be fallow plowed in the summer of 1959 was kept in cultivation for testing chemicals and rates of chemicals and their value in killing sugarcane. The cane was cultivated, fertilized and handled in the routine practices of the Alma plantation. Mosaic disease was not apparent in the cane and the studies were made with apparently healthy cane.

The first test was made on June 9, 1959. The following mixtures were applied with a compressed air sprayer using a single 8006 Spraying System nozzle tip at approximately 35 p.s.i.

Starting at the northeast side of the block and spraying toward the south along the headland.

| | | | | |
|---|---|---|---|---|
| Row 1 | 100 cc | Garlon | 900 cc | Oil |
| Row 2 | 200 cc | Garlon | 800 cc | Oil |
| Row 3 | 500 cc | Garlon | 500 cc | Oil |
| Row 4 | 1000 cc | Garlon | — | — |
| Row 5 | 100 cc | Fenac | 900 cc | Oil |
| Row 6 | 200 cc | Fenac | 800 cc | Oil |
| Row 7 | 500 cc | Fenac | 500 cc | Oil |
| Row 8 | — | — | 1000 cc | Oil |

Each 1000 cc of the mixture w applied on approximately 25 sto of sugarcane stubble. The cane w approximately 20 inches high at t time the materials were applied.

Another test with the oil fortifi with Garlon was made June 24, 19 when the cane was 30 to 36 inc high. The number of stools treat with 1000 cc was reduced to 15 about one-half the number treated the test made June 9.

All materials and rates of chem cals used alone or in fortified oil we effective in the initial knock-dow The unfortified oil was effective killing the cane on the initial knoc down but resprouting occurred over 90 per cent of the stools treate There was no resprouting where Ga lon was used to fortify the oil. So resprouting occurred in the tre ments where Fenac ester was us to fortify the oil.

The most effective treatment

**Table 1. Distribution of mosaic infect stools of sugarcane in a commercial planting of C.P. 52-68 (3 acres) that was rogued with petroleum solvents and chemicals. 1959.**

| Row Number[1] | Number of Stools Infected and Killed June 17 | June 24 | July 1 | July 15 | Total number stools killed each row | Per nos. |
|---|---|---|---|---|---|---|
| 1[3] | 36 | 7 | 0 | 1 | 44 | 5. |
| 2 | 15 | 7 | 0 | 2 | 24 | 2. |
| 3 | 35 | 0 | 0 | 0 | 35 | 4. |
| 4 | 15 | 1 | 0 | 2 | 18 | 2. |
| 5 | 0 | 5 | 0 | 1 | 6 | 0. |
| 6 | 1 | 0 | 1 | 0 | 2 | 0. |
| 7 | 1 | 1 | 0 | 2 | 4 | 0. |
| 8 | 6 | 2 | 1 | 2 | 11 | 1. |
| 9 | 10 | 1 | 0 | 0 | 11 | 1. |
| 10 | 1 | 2 | 0 | 0 | 3 | 0. |
| 11 | 1 | 2 | 0 | 1 | 4 | 0. |
| 12 | 1 | 1 | 0 | 0 | 2 | 0. |
| 13 | 0 | 4 | 4 | 1 | 9 | 1. |
| 14 | 0 | 0 | 0 | 0 | 0 | 0. |
| 15 | 3 | 2 | 1 | 0 | 6 | 0. |
| 16 | 0 | 0 | 0 | 0 | 0 | 0. |
| 17 | 6 | 0 | 0 | 0 | 6 | 0. |
| 18 | 0 | 0 | 0 | 0 | 0 | 0. |
| 19 | 0 | 0 | 0 | 1 | 1 | 0. |
| 20 | 0 | 0 | 0 | 0 | 0 | 0. |
| 21 | 4 | 0 | 0 | 0 | 4 | 0. |
| 22 | 0 | 0 | 1 | 1 | 2 | 0. |
| 23 | 0 | 0 | 3 | 0 | 3 | 0. |
| 24 | 2 | 0 | 0 | 0 | 2 | 0. |
| 25 | 0 | 0 | 0 | 0 | 0 | 0. |
| Total stools mosaic killed[2] | 137 | 35 | 11 | 14 | 197 | |
| Per cent killed | 0.6 | 0.16 | 0.06 | 0.63 | 0.9 | |

1. 880 stools per row.
2. 22,000 stools on 3 acres.
3. North side of block.

e test was where four parts of oil as fortified with one part of Gar-n. There was some resprouting in e treatments using nine parts of l fortified with one part Garlon, wever, the resprouts died before ey were two weeks old.

During the 1959 season 876 stools sugarcane were treated with the ur parts of oil fortified with 1 part Garlon. Resprouting occurred in ree stools. This resprouting was rhaps because of inadequate cov-age at the time the stools were rayed.

On June 15, 1959 a three acre ock of sugarcane, C.P. 52-68, was nsidered too heavily infested with osaic to be rogued by hand. This ock of sugarcane was surrounded ith N.Co. 310 heavily infested with osaic. The block of cane C.P. 52-68 d eight rows of N.Co. 310 on the rth and south side was used to mmercially test the method of rogu-g with oil fortified with Garlon.

**ble 2. Distribution of mosaic infected stools of sugarcane in a commercial planting of N.Co. 310 (1 acre sections) that was rogued with petroleum solvents and chemicals. 1959.**

| w ber[1] | No. of stools infected and killed June 24 | July 1 | Total number stools killed each row | Per cent mosaic |
|---|---|---|---|---|
| | North Side (1 acre approximately) | | | |
| 1[3] | 26 | 0 | 26 | 3.0 |
| 2 | 0 | 0 | 0 | 0.0 |
| 3 | 49 | 11 | 60 | 6.9 |
| 4 | 5 | 0 | 5 | 0.6 |
| 5 | 37 | 32 | 69 | 7.8 |
| 6 | 4 | 1 | 5 | 0.6 |
| 7 | 15 | 6 | 21 | 2.4 |
| 8 | 0 | 7 | 7 | 0.8 |
| tal stools osaic killed[2] | 136 | 57 | 193 | |
| r cent killed | 1.9 | .8 | 2.7 | |
| | South Side (1 acre approximately) | | | |
| 1[4] | 0 | 0 | 0 | 0.0 |
| 2 | 1 | 1 | 2 | 0.2 |
| 3 | 1 | 3 | 4 | 0.5 |
| 4 | 1 | 0 | 1 | 0.1 |
| 5 | 1 | 1 | 2 | 0.2 |
| 6 | 1 | 0 | 1 | 0.1 |
| 7 | 0 | 0 | 0 | 0.0 |
| 8 | 0 | 0 | 0 | 0.0 |
| tal stools osaic killed | 5 | 5 | 10 | |
| r cent killed | 0.6 | 0.6 | 1.2 | |

880 stools per row.
7,040 stools.
South side.
North side.

**Table 3. The amount of materials used and cost of roguing mosaic infested sugarcane.**

| Date Treated | Number stools killed[3] | Amount material required | Cost per stool[1,2] |
|---|---|---|---|
| June 9 | 118 | 1 gallon | 1½ cents |
| June 17 | 137 | 4 gallons | 5 cents |
| June 24 | 35 | 2 gallons | 10 cents |
| July 1 | 11 | 1½ gallons | 23 cents |
| July 15 | 14 | 3 gallons | 37 cents |

1. Diesel oil mixed 1 gallon Garlon with 4 gallons oil.
2. Garlon at $8.00 per gallon in 5 gallon containers.
3. Only the base of the young shoots was sprayed in the late experiments. In the early treatments most of the young shoots were sprayed.

The mixture consists of four gallons of diesel oil mixed with one gallon of Garlon. The results of this test are shown in Tables 1 and 2.

Table 3 shows the amount of material and the cost involved in the roguing of mosaic infected sugarcane. It can be seen that as the sugarcane continued to grow and joints were formed the amount of material required to kill an individual stool was increased and the cost, at this concentration was increased. From these results it is apparent that early roguing should be stressed to remove the heavy infestation. From observations made in the past the first roguing should be done at or following fertilization of the sugarcane.

Studies will be made in 1960 to determine if the concentration of the fortified oil can be reduced as the sugarcane begins to form mature joints near the ground.

Tables 1 and 2 show the patterns of mosaic distribution in 5 acres of sugarcane. It may be seen that the mosaic distribution is higher on odd or even rows. Even though all the seed cane came from the same location the planting was made from individual carts on every other row. The data shown in these tables indicate that several counts in individual blocks are necessary to arrive at an average percentage of mosaic infestation.

## UP FRONT

(Continued from page 119)

of Houma, Felix H. Savoie, of Paincourtville, B. C. Thomson, of Thibodaux, and George P. Bywater, W. K. DePass, Jr., F. Evans Farwell, John F. Finke, E. D. Gelzer, L. C. Gerard, Wm. J. Gibbens, Jr., Milton F. Hilbert, Thomas B. Kennair, James H. Kepper, Richard McCarthy, Jr., Ralph Ross, Harold Scherer, Mrs. Oralee C. Schulz, and S. L. Wright, all of New Orleans.

The officers of the State Agricultural Credit Corporation are L. C. Gerard, President, F. Evans Farwell, 1st Vice-President, J. J. Munson, 2nd Vice President, Mrs. Oralee C. Schulz, Secretary-Treasurer, and E. D. Gelzer, Assistant Secretary and Assistant Treasurer.

### Henderson Moving

The office of the Henderson Sugar Refinery is moving to Mobile. The refinery will remain in New Orleans until such time as a new plant is erected on a new site, probably at Pascagoula, Mississippi. The Notice regarding the move to Mobile reads as follows:

"Effective March 7, 1960 our Executive, Credit, Accounting, Sa and Traffic departments will be cated in the Waterman Building, M bile, Alabama. The mailing addre is P. O. Box 1103, Mobile, Alaban The telephone number is Hemlo 8-3531."

Communications, remittances, cc respondence orders, inquiries, cre information, sales, tickets, wa house deliveries, etc., dispatched f attention on and after March 15 should be directed to our Mobile c fice."

### Short Course

The Annual Short Course for S perintendents and Operators of W ter and Sewerage Systems will held at Louisiana State University March 16, 17, and 18 and the de of the College of Engineering a Director of the Engineering Expe ment Station, Dr. Fred H. Fenn, h asked us to call the course to t attention of the readers of *The Su ar Bulletin.*

The dates are March 16th, 17 and 18th, and the place is Louisia State University, Baton Rouge, L For details write to Dr. Fenn.

**Canes at Canal Point, Florida, potted for use in next cane breeding season. A huge cane breeding house is in the background.**

## WASHINGTON

(Continued from page 121)

plained to representatives of the mestic sugar industry.

The new Act would be for a period four years, extending through 64.

The marketing quota for the do-estic beet sugar area would be in-eased by 150,000 tons and the quo- for the mainland cane area by ,000 tons. The domestic deficit oration provisions of the Act ould be revised so that the two ainland areas would no longer are in any deficits which might cur in the quotas for Puerto Rico d the Virgin Islands. Such defi-s which heretofore have gone to ainland cane and sugar beet areas ould be prorated to Cuba and other ull duty" countries. Minor changes ould be made in the order of pro-tion to other areas of any deficits nich might occur in Hawaii and e two mainland areas.

In order to strengthen the Secretary of Agriculture's ability to obtain sugar supplies as needed if offshore supplies of raw sugar were inadequate, the quota for any foreign country other than the Republic of the Philippines would be reduced by the amount of the deficit declared against it.

The President would be authorized whenever such action is needed to insure adequate supplies of sugar or is otherwise required in the national interest to reduce the quota for any foreign country other than the Republic of the Philippines without the necessity or waiting for additional legislation. This authority to reduce foreign quotas would be limited to a calendar year, and would be made in a manner consistent with our international obligations. In case of emergency where large quantities of sugar might be needed late in a marketing year when timing of delivery would be of prime importance, the

*GET DEPENDABLE CONTROL WITH*

**CHIPMAN**

**WEED & GRASS KILLERS**

**2, 4-D AMINE:** For selective spraying of Johnson grass seedlings; also alligator weed and other susceptible broadleaved weeds in sugarcane. Applied spring and fall.

**ATLACIDE:** The safer chlorate . . . kills Johnson grass; other weeds and grasses along headlands, in ditches and other non-crop areas. Backed by years of outstanding results. Applied as a spray.

**SODIUM TCA:** For control of Johnson grass in sugarcane.

*Write for Information*

**CHIPMAN CHEMICAL CO.** Box 272 D Pasadena, Texas

Secretary of Agriculture would be authorized to acquire replacement sugar in the manner he deems appropriate at the time such action may be taken.

The provisions relating to domestic quotas would become effective January 1, 1961; and provisions relating to foreign quotas would become effective upon enactment.

By the time this issue of the Bulletin is off the press, the bills will have been submitted to the Speaker of the House, and the President of the Senate, and referred to the appropriate committees, namely, the Agriculture Committee of the House of Representatives and the Finance Committee of the Senate, for action.


**FOR SALE**

2 Used Sugar Cane Harvesters

Telephone — Congress 54024

Vacherie, La.



***"Sugar Factory Insurance Specialists"***

**GILLIS, HULSE and COLCOCK, Inc.**

839 Union St. New Orleans, La.

Telephone JA 2-1225



**Commercial Members of the AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC**

AMERICAN MOLASSES CO., OF LOUISIANA, INC.
400 N. Gayoso St.
New Orleans, La.

HARRY L. LAWS & CO., INC.
126 Carondelet Street
New Orleans 12, La.

THE HIBERNIA NATIONAL BANK
New Orleans, La.

LAMBORN & COMPANY, INC.
Whitney Building
New Orleans, La.

LEBOURGEOIS BROKERAGE CO.
823 Perdido Street
New Orleans, La.

THE NATIONAL BANK OF COMMERCE
New Orleans, La.

NATIONAL SUGAR REFINING CO.
Carondelet Bldg.
New Orleans, La.

PENICK & FORD LTD., INC.
National Bank of Commerce Bldg.
New Orleans, La.

ESSO STANDARD OIL COMPANY
(Louisiana Division)
P. O. Box 1250 New Orleans 10, La

STANDARD SUPPLY & HARDWARE CO., INC.
822 Tchoupitoulas St.
New Orleans, La.

STATE AGRICULTURAL CREDIT CORP., INC.
837 Whitney Building
New Orleans, La.

WHITNEY NATIONAL BANK
New Orleans, La.

LOUISIANA STATE UNIVERSITY LIBRARY

A.J.Keller
P.O. Box 8967
University Station
Baton Rouge 3, La. (3)

# THE SUGAR BULLETIN

38—No. 11 MARCH 1, 1960

*ial Bulletin of the American Sugar Cane League of the U. S. A.*

PRINTED ON PAPER MADE FROM
LOUISIANA SUGAR CANE BAGASSE

## *In This Issue*

Up Front With The League ..... 135
**W. F. Giles Passes On—Use Tax On Trucks**

In The Field With Lloyd L. Lauden ..... 136
**Contact Committee Meeting At L. S. U.**

In Washington With Joe Ferris ..... 137

Fertilizer Investigations On Sugarcane In 1958 ..... 138

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry

THE
# SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Edi

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

Issued on the 1st and 15th of each month. Subscription: Member 50 cents a year. Non-Members $3.00 a year.

Washington Office, 510 Union Trust Bldg., Washington, D. C.
Josiah Ferris, Manager

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
W. F. Giles, Jeanerette, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

# UP FRONT WITH THE LEAGUE

*by A. W. Dykers*

## W. F. Giles Passes On

Colonel W. F. Giles, who was the th President of the American Sug- Cane League, heading this organi- ion from September 28, 1939 to tember 25, 1941, died in a hospi- in New Iberia on February 23d er a long illness. He was in his ly nineties.

The Colonel was probably the most orful personality to grace the nes in this part of the sugar rld during the past half century. erybody knew him. At the time of death he was a member of the ecutive Committee of the Ameri- Sugar Cane League, and co- irman of the Industry Grower- cessor Committee. First and fore- st, Colonel Giles was a cane grow- and never missed an opportunity champion the cause of the farmer. could be said, with a modicum of th, that, after turning ninety, he wed down a bit, but this would rt a good argument if made with- ear-shot of the Colonel. In appear- e he never changed. The accom- ying picture was taken twenty l years ago!

Colonel Giles missed most of the ague meetings during the past ar and we missed him. Now he dead but the fact that we knew n during part of his colorful life ll always be one of our cherished mories. The Colonel was quite a rson.

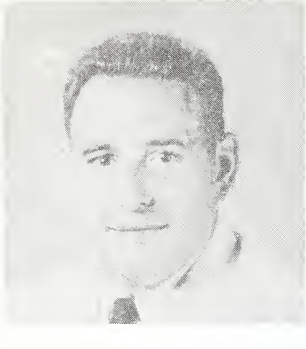
## Use Tax On Trucks

Some confusion has again arisen th respect to the Federal Use Tax Highway Motor Vehicles. The is based on the taxable gross ight of a vehicle. However, to as-

certain whether a truck or truck-tractor is subject to the tax and also to ascertain the taxable gross weight assigned to the vehicle under the Treasury Department Regulations, there must be first determined the actual unloaded weight of the vehicle fully equipped for service.

The question causing confusion is how to determine the actual unloaded weight of a truck-tractor fully equipped for service. This is determined from the empty or tare weight of the vehicle itself, including the body (if any), all accessories; all equipment attached to or carried on the vehicle for use in connection with the movement of the vehicle by means of its own motor or for use in the maintenance of the vehicle; and a full complement of lubricants, fuel and water. The trailer or semitrailer should not be included and should not be weighed. If the actual unloaded

(Continued on page 146)



# IN THE FIELD WITH LLOYD LAUDE

*by Lloyd L. Lauden*

## Contact Committee Meeting At L. S. U.

The annual spring meeting of the Contact Committee of the American Sugar Cane League will be held this year on Tuesday, the 15th of March. It will be held at Knapp Hall Auditorium in the Agricultural Extension Building of L.S.U. in Baton Rouge, Louisiana. Dr. Charles Upp, Director of the Experiment Station and Mr. Malcolm Duhe, Chairman of the Committee, have extended special invitations to all sugar cane growers and others interested in the crop to attend this all important and informative meeting.

The program, as indicated below, includes many important topics to be discussed:

PROGRAM

*Morning*

9:30 - 10:00

Results With Some New Varieties of Sugar Cane in Outfield Tests During 1959.—T. J. Stafford and R. J. Matherne.

The Effect Of Two Dates Of Planting On Yields Of Sugar Cane Grown On Richland Silt Loam In Lafayette Parish.—T. J. Stafford and R. J. Matherne.

10:00 - 10:25

Report On New Sugar Cane Varieties.—E. C. Simon.

10:25 - 10:40

Recess

10:40 - 11:30

Seed Production and Breeding.—S. J. P. Chilton.

11:30 - 12:00

Sugar Cane Breeding.—Louis Anzalon.

Insect Investigations.—W. H. Long, E. A. Concienne and L. D. News

12:00 - 1:30

Noon Recess

*Afternoon*

1:30 - 2:15

Fertilizer Experiments With Su Cane For 1959 and the N, P K Content of Sugar Cane Dur The Growing Season.—L. E. C den.

2:15 - 3:00

Research In Agricultural Engine ing In The Sugar Cane Area W. H. Carter, M. M. Mayea W. F. Lytle, I. L. Saveson.

3:00 - 3:15

Recess

3:15 - 3:45

Diseases Of Sugarcane.—I. L. Forbes and R. J. Steib.

3:45 - 4:05

Weed Control In Sugar Cane.—E. R. Stamper.

4:05 - 4:20

Cost Studies.—J. R. Campbell

NOTE: Agricultural Extens Building is located on Highland Rc

Check the program carefully to that each subject has an aim tow increased production either for present or the future. All subje to be discussed will be importa Some of the information to be p sented can be used almost immedia ly, such as the information on Mos disease control, fertilizer recomm dations, grass control recommen tions, and borer control. Other formation on other subjects can used later in the year and genera throughout the crop year.

(Continued on page 147)

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*

It looks now like the legislative ıin for sugar may be side-tracked · several weeks.

The draft of the bill on which vernment and industry representa- es have labored for the past three ɔnths has been flatly turned down representative Harold Cooley, airman ot the House Committee Agriculture, where sugar legisla- n must originate. Because of oley's rebuff the government has t officially sent the bill to Con- ess.

In past years when the Sugar act s been up for consideration, Mr. oley told industry spokesman to st get complete agreement among emselves and the State and Agri- lture Departments—then—"I will along with you." So far this year r. Cooley has not promised any- ing, although industry and govern- ent are apparently in complete reement on proposals which would odify and extend the Sugar Act rough 1964.

On numerous occasions Mr. Cooley s stated that he favors a one-year tension of the present Act without ange. Administration and industry lesmen do not seem to be able to rsuade him to change his mind. ıe Act expires December 31, 1960 d the legislative days of the 86th ɔngress are rapidly becoming too w for comfort as far as the sugar dustry is concerned.

Mr. Cooley's reluctance to let s committee consider proposed sug- legislation apparently has been ought about by a desire to protect e Cuban sugar industry from being torn asunder by his colleagues in the House, and Senate, who are mad because the Red-tinged, viciously anti-American Revolutionary government officials of Cuba have subjected the United States and its citizens to almost every degrading insult which they, and their communistic colleagues, could dream up. Naturally these insults have caused hot blooded members of Congress to "burn", while our Department of State "fiddled" with infinitesimal details of world-wide diplomacy.

The heat in Congress to reduce Castro to his proper level (where he has to reach up to touch bottom) is now in the "blueflame" stage. According to Senator Allen J. Ellender of Louisiana, — "American prestige, American interests, the urgent requirement for hemisphere solidarity cannot survive many more Cubas." Like Senator Ellender many members of Congress resent the apparent inactivity of our State Department and have proposed some forty odd bills in retaliation against Castro and his powerful minority Revolutionary party. It is common knowledge that if the Sugar Act came before Congress today the Cuban quota would be drastically cut, and the Cuban sugar industry, which is not responsible for Castro, would be destroyed.

Secretary of State Christian A. Herter was recently quoted by the Associated Press as saying that—"Consideration is being given to cancellation of the U. S. buying system under which Cuban sugar has been

(Continued on page 147)

# FERTILIZER INVESTIGATIONS ON SUGARCANE IN 19

*By L. G. Davidson, Research Agronomist, Crops Research Division, Agricultural Research Service, United States Department of Agriculture*

*(Report to the Contact Committee of the American Sugar Cane Leagu June 23, 1959)*

During 1958, 16 fertilizer experiments were conducted by the Houma Station at various locations in the sugarcane area of Louisiana. Seven of these were superimposed on the outfield variety tests in cooperation with agronomists at the Houma S tion. Fertilizer materials used w ammonium nitrate, aqua and an drous ammonia, superphosphate, muriate of potash. In most of small-plot tests, the cane was ha

**TABLE 1**
**Effects of 40 and 80 pounds of nitrogen per acre on light soil [1]**
**(Averages of 18 varieties of plant cane)**
**1958**

| Plantation and date of harvest | Nitrogen per acre | Crusher-juice analysis | | | Cane per acre | Sug per ac |
|---|---|---|---|---|---|---|
| | | Brix | Sucrose | Purity | | |
| | Pounds | | % | % | Tons | Pou |
| Oaklawn 11-26-58 | 40 | 17.12 | 14.41 | 84.17 | 17.69 | 3,47 |
| | 80 | 17.02 | 14.25 | 83.73 | 18.70* | 3,6 |
| Raceland 11-19-58 | 40 | 16.61 | 13.72 | 82.60 | 21.40 | 3,97 |
| | 80 | 16.61 | 13.73 | 82.66 | 22.81 | 4,2 |
| Averages | 40 | 16.86 | 14.06 | 83.39 | 19.54 | 3,72 |
| | 80 | 16.82 | 13.99 | 83.17 | 20.76 | 3,9 |

[1] Agronomy variety test fields.
* Significant at 5% level.

**TABLE 2**
**WOODLAWN PLANTATION**
**Houma, La.**
**Plant cane—1958**

**Mhoon silt loam** **N. Co. 3**

| Fertilizer treatments N - $P_2O_5$ - $K_2O$ (pounds per acre) | Crusher-juice analysis | | | Cane per acre | Indicated available 96° sugar at harve | |
|---|---|---|---|---|---|---|
| | Brix | Sucrose | Purity | | Per ton of cane | Per ac |
| | | % | % | Tons | Pounds | Pounds |
| 60-0-0 | 17.48 | 14.60 | 83.52 | 23.84 | 199.7 | 4,761 |
| 60-0-60 | 17.42 | 14.68 | 84.27 | 23.22 | 201.8 | 4,686 |
| 60-60-60 | 17.51 | 14.78 | 84.41 | 24.13 | 203.3 | 4,906 |
| 90-0-0 | 17.90 | 15.21 | 84.97 | 23.48 | 210.0 | 4,931 |
| 90-0-60 | 17.70 | 15.16 | 85.65 | 25.19 | 210.1 | 5,292 |
| 90-60-60 | 18.18 | 15.65 | 86.08 | 25.60 | 217.5 | 5,568 |

There were no significant differences in yields of cane or sugar per acre betwe the two nitrogen treatments, or the phosphate and potash treatments. Data are ave ages for 4 plots, each 3 rows wide and 50 feet long. Fertilizer applied April 22; ca harvested November 28, 1958.

t and weighed with the station ne-weighing machine, and the field mples were milled and analyzed at e Houma Station. In the large-plot periments the cane was machine- t and weighed on the factory scale, nd the samples were milled and ana- zed at the factory. Data on crusher- ice analysis and indicated yields sugar per ton of cane as calcu- ted by the Winter - Carp - Geerligs rmula appear in tables 1-10. Calculations are based on fresh, clean cane, properly hand - topped, and therefore recoveries were somewhat higher than would be obtained by factories with machine - harvested cane.

*Rate-of-nitrogen experiments:*

The effects of various rates of nitrogen on yields and on juice quality were studied in 13 experiments: 5 with plant cane, 5 with first stub-

**TABLE 3**
**MANDALAY PLANTATION**
**Plant cane—1958**

**Mhoon very fine sandy loam** **Two varieties**

| Fertilizer treatments N - $P_2O_5$ - $K_2O$ (pounds per acre) | Crusher-juice analysis | | | Cane per acre | Indicated available 96° sugar at harvest | |
|---|---|---|---|---|---|---|
| | Brix | Sucrose | Purity | | Per ton of cane | Per acre |
| | | % | % | Tons | Pounds | Pounds |
| **C.P. 44-101** | | | | | | |
| 0- 0- 0 | 18.63 | 16.48 | 88.46 | 24.06 | 232.1 | 5,584 |
| 0-50-50 | 18.71 | 16.56 | 88.51 | 23.16 | 233.3 | 5,403 |
| 40- 0- 0 | 18.30 | 15.90 | 86.88 | 23.84 | 222.0 | 5,292 |
| 40-50-50 | 18.92 | 16.89 | 89.27 | 23.74 | 239.0 | 5,674 |
| 80- 0- 0 | 18.47 | 16.16 | 87.49 | 24.07 | 226.4 | 5,449 |
| 80-50-50 | 18.24 | 15.97 | 87.55 | 25.69 | 223.8 | 5,749 |
| 120- 0- 0 | 18.08 | 15.72 | 86.95 | 25.94 | 219.5 | 5,694 |
| 120-50-50 | 18.09 | 15.74 | 87.01 | 27.17 | 219.9 | 5,975 |
| **N.Co. 310** | | | | | | |
| 0- 0- 0 | 18.55 | 16.33 | 88.03 | 26.82 | 229.5 | 6,155 |
| 0-50-50 | 18.72 | 16.59 | 88.62 | 26.12 | 233.9 | 6,109 |
| 40- 0- 0 | 19.04 | 17.03 | 89.44 | 26.18 | 241.2 | 6,315 |
| 40-50-50 | 18.78 | 16.72 | 89.03 | 25.90 | 236.3 | 6,120 |
| 80- 0- 0 | 18.36 | 16.14 | 87.91 | 26.57 | 226.6 | 6,021 |
| 80-50-50 | 18.36 | 16.18 | 88.13 | 29.37 | 227.5 | 6,682 |
| 120- 0- 0 | 18.48 | 16.23 | 87.82 | 26.74 | 227.8 | 6,091 |
| 120-50-50 | 18.54 | 16.45 | 88.73 | 28.68 | 232.1 | 6,657 |
| **Averages (for N)** | | | | | | |
| No nitrogen | 18.65 | 16.49 | 88.42 | 25.04 | 232.1 | 5,813 |
| 40 pounds | 18.76 | 16.63 | 88.65 | 24.92 | 234.8 | 5,850 |
| 80 pounds | 18.36 | 16.11 | 87.74 | 26.42 | 226.2 | 5,975 |
| 120 pounds | 18.30 | 16.03 | 87.60 | 27.13 | 225.0 | 6,104 |
| L.S.D. for N averages (.05) | | | | 1.68 | | N.S. |
| **Averages (for $P_2O_5$ + $K_2O$)** | | | | | | |
| No $P_2O_5$ or $K_2O$ | 18.49 | 16.25 | 87.88 | 25.53 | 228.2 | 5,825 |
| 50 pounds each | 18.54 | 16.39 | 88.40 | 26.23 | 230.5 | 6,046 |

PK differences are not significant

Data, except averages, are averages of four plots, each 3 rows wide and 30 feet long. Fertilized April 22, 1958; harvested December 16, 1958.

ble, and 3 with second stubble. Average data showed that the rates of nitrogen used had little effect on crusher-juice sucrose. Plant-cane data are shown in tables 1-4.

Table 1 shows the effects of ) and 80 pounds of nitrogen per ac (36 replications) in 2 outfield agro omy variety tests on light soil. T higher rate of nitrogen did not s

TABLE 4
HOUMA STATION
Houma, La.
Plant cane—1958

Mhoon silty clay loam — Four varietie

| Nitrogen per acre (pounds) | Crusher-juice analysis | | | Cane per acre | Indicated available 96° sugar at harves | |
|---|---|---|---|---|---|---|
| | Brix | Sucrose | Purity | | Per ton of cane | Per acr |
| | | % | % | Tons | Pounds | Pounds |
| | | C.P. 44-101 | | | | |
| 0 | 16.03 | 12.43 | 77.54 | 24.03 | 163.1 | 3,919 |
| 40 | 17.26 | 13.99 | 81.05 | 29.28 | 188.3 | 5,513 |
| 80 | 17.03 | 13.74 | 80.68 | 30.24 | 184.4 | 5,576 |
| 120 | 16.23 | 12.44 | 76.65 | 32.86 | 162.0 | 5,323 |
| | | C.P. 36-105 | | | | |
| 0 | 16.22 | 12.90 | 79.53 | 23.38 | 165.0 | 3,858 |
| 40 | 16.83 | 13.58 | 80.69 | 30.79 | 175.1 | 5,391 |
| 80 | 16.95 | 13.78 | 81.30 | 29.47 | 178.5 | 5,260 |
| 120 | 16.92 | 13.68 | 80.85 | 32.11 | 176.6 | 5,671 |
| | | C.P. 52-68 | | | | |
| 0 | 17.11 | 14.03 | 82.00 | 18.70 | 186.3 | 3,484 |
| 40 | 17.04 | 13.94 | 81.81 | 24.64 | 184.9 | 4,556 |
| 80 | 17.59 | 14.83 | 84.31 | 26.08 | 199.9 | 5,213 |
| 120 | 18.34 | 15.38 | 83.86 | 28.13 | 206.7 | 5,814 |
| | | N.Co. 310 | | | | |
| 0 | 16.70 | 13.25 | 79.34 | 20.25 | 176.2 | 3,568 |
| 40 | 16.68 | 13.40 | 80.34 | 27.27 | 179.4 | 4,892 |
| 80 | 16.86 | 14.14 | 83.87 | 29.65 | 193.8 | 5,746 |
| 120 | 16.89 | 13.81 | 81.76 | 31.13 | 186.7 | 5,812 |
| | | Averages | | | | |
| 0 | 16.52 | 13.15 | 79.60 | 21.59 | 171.7 | 3,707 |
| 40 | 16.95 | 13.73 | 81.00 | 28.00 | 181.7 | 5,088 |
| 80 | 17.11 | 14.12 | 82.52 | 28.86 | 188.8 | 5,449 |
| 120 | 17.10 | 13.83 | 80.88 | 31.06 | 182.1 | 5,655 |
| L.S.D. for averages only (.05) | | | | 1.93 | | 405 |
| L.S.D. for averages only (.01) | | | | 2.59 | | 546 |

Data, except averages, are averages for 3 plots, each 3 rows wide and 26 fee long. Fertilized April 30, 1958; harvested November 26, 1958.

## TABLE 5

**Effects of 80 and 120 pounds of nitrogen per acre on light soil [1]**
**(Averages for first-stubble cane of 16 varieties)**
**1958**

| Plantation and ate of harvest | Nitrogen per acre | Crusher-juice analysis | | | Cane per acre | Sugar per acre |
|---|---|---|---|---|---|---|
| | | Brix | Sucrose | Purity | | |
| | Pounds | | % | % | Tons | Pounds |
| aklawn | 80 | 16.06 | 12.89 | 80.26 | 23.22 | 4,010 |
| 1-7-58 | 120 | 16.08 | 12.95 | 80.53 | 25.60** | 4,429** |
| aceland | 80 | 15.59 | 12.62 | 80.95 | 24.26 | 4,081 |
| 1-3-58 | 120 | 15.63 | 12.61 | 80.68 | 25.18 | 4,215 |
| evert-St. John | 80 | 16.84 | 13.72 | 81.47 | 26.74 | 5,004 |
| 1-10-58 | 120 | 16.82 | 13.78 | 81.93 | 26.64 | 5,022 |
| Average | 80 | 16.16 | 13.08 | 80.94 | 24.74 | 4,365 |
| | 120 | 16.18 | 13.11 | 81.03 | 25.81* | 4,555* |

[1] Agronomy variety test fields.
* Significant at 5% level. ** Significant at 1% level.

## TABLE 6

**RANCH PLANTATION**
**Houma, La.**
**First-stubble cane**
**1958**

**Mhoon very fine sandy loam** **N. Co. 310**

| rtilizer treatments N - $P_2O_5$ - $K_2O$ | Crusher-juice analysis | | | Cane per acre | Indicated available 96° sugar at harvest | |
|---|---|---|---|---|---|---|
| | Brix | Sucrose | Purity | | Per ton of cane | Per acre |
| | | % | % | Tons | Pounds | Pounds |
| **Average yields for each treatment** | | | | | | |
| 80- 0- 0 | 18.04 | 15.78 | 87.47 | 23.22 | 221.0 | 5,132 |
| 80-50-50 | 18.07 | 15.90 | 87.99 | 25.31 | 223.4 | 5,654 |
| 120- 0- 0 | 17.69 | 15.36 | 86.83 | 24.42 | 214.4 | 5,236 |
| 120-50-50 | 18.06 | 15.84 | 87.71 | 25.33 | 222.2 | 5,628 |
| **Average response to nitrogen without regard to P+K*** | | | | | | |
| 80 pounds nitrogen | 18.06 | 15.84 | 87.71 | 24.26 | 222.2 | 5,393 |
| 120 pounds nitrogen | 17.88 | 15.60 | 87.25 | 24.88 | 218.3 | 5,432 |
| **Average response to P+K without regard to nitrogen** | | | | | | |
| No $P_2O_5$ or $K_2O$ | 17.87 | 15.57 | 87.13 | 23.82 | 217.6 | 5,184 |
| 50 pounds of each | 18.07 | 15.87 | 87.82 | 25.32 | 222.8 | 5,641 |
| L.S.D. for $P_2O_5$ + $K_2O$ averages (.05) | | | | 1.21 | | 321 |
| L.S.D. for $P_2O_5$ + $K_2O$ averages (.01) | | | | N.S. | | 448 |

* Yield differences for nitrogen rates are not significant.

Data, except averages, are averages for 7 plots, each 3 rows wide and 50 feet ong. Fertilizer applied April 22, 1958; cane harvested November 14, 1958.

nificantly increase yields of sugar per acre in either test.

In a light-soil test on Woodlawn Plantation, 90 pounds of nitrogen per acre as compared with 60 lbs., did not significantly affect yields of cane or sugar per acre (table 2). Four rates of nitrogen on light soil on Mandalay Plantation did not significantly affect yields of sugar p acre (table 3).

Table 4 shows data from a t on Mhoon silty clay loam on the Ho ma Station, using 4 rates of nitrog There were highly significant creases in yields of cane and sug per acre from the use of 40 pour of nitrogen as compared with the u

**TABLE 7**
**HOUMA STATION**
**Houma, La.**
**First stubble—1958**

Mhoon silty clay loam — Two varietie

| Nitrogen per acre (pounds) | Crusher-juice analysis | | | Cane per acre | Indicated available 96° sugar at harvest | |
|---|---|---|---|---|---|---|
| | Brix | Sucrose | Purity | | Per ton of cane | Per acre |
| | | % | % | Tons | Pounds | Pounds |
| | | C.P. 44-101 (Healthy)[1] | | | | |
| 0 | 16.33 | 13.31 | 81.51 | 23.38 | 179.7 | 4,201 |
| 40 | 16.02 | 13.00 | 81.15 | 28.85 | 175.1 | 5,052 |
| 80 | 16.56 | 13.57 | 81.94 | 31.90 | 183.7 | 5,860 |
| 120 | 16.03 | 12.83 | 80.04 | 34.42 | 171.4 | 5,900 |
| | | C.P. 44-101 (R.S.D.)[2] | | | | |
| 0 | 16.06 | 12.89 | 80.26 | 22.53 | 172.5 | 3,886 |
| 40 | 16.62 | 13.70 | 82.43 | 28.10 | 186.1 | 5,229 |
| 80 | 16.48 | 13.28 | 80.58 | 29.28 | 178.1 | 5,215 |
| 120 | 16.56 | 13.39 | 80.86 | 31.77 | 180.0 | 5,719 |
| | | C.P. 43-47 (Healthy)[1] | | | | |
| 0 | 16.43 | 13.64 | 83.02 | 17.22 | 182.3 | 3,139 |
| 40 | 16.66 | 13.85 | 83.13 | 22.18 | 185.3 | 4,110 |
| 80 | 16.69 | 13.87 | 83.10 | 26.50 | 185.5 | 4,916 |
| 120 | 16.84 | 14.02 | 83.25 | 23.98 | 187.7 | 4,501 |
| | | C.P. 43-47 (R.S.D.)[2] | | | | |
| 0 | 17.21 | 14.39 | 83.61 | 14.59 | 193.1 | 2,817 |
| 40 | 17.53 | 14.61 | 83.34 | 20.79 | 195.7 | 4,069 |
| 80 | 17.34 | 14.55 | 83.91 | 22.51 | 195.6 | 4,403 |
| 120 | 17.74 | 15.03 | 84.72 | 25.80 | 203.1 | 5,240 |
| | | Averages | | | | |
| 0 | 16.51 | 13.56 | 82.13 | 19.43 | 180.7 | 3,511 |
| 40 | 16.71 | 13.79 | 82.52 | 24.98 | 184.7 | 4,615 |
| 80 | 16.77 | 13.82 | 82.41 | 27.55 | 185.0 | 5,098 |
| 120 | 16.79 | 13.82 | 82.31 | 28.99 | 184.2 | 5,340 |
| L.S.D. for Averages only (.05) | | | | 1.80 | | 466 |
| L.S.D. for averages only (.01) | | | | 2.41 | | 623 |

Data, except averages, are averages of 3 plots, each 3 rows wide and 27½ fe long. Fertilized April 14, 1958; harvested November 7, 1958.

[1] Planted with first progeny from hot-air-treated seed.
[2] Planted with seed infected with R.S.D.

ertilized controls, and from 120 ounds of nitrogen as compared with 0 pounds.

A summary of the rate-of-nitrogen xperiments on plant cane showed o significant increases in yields of ugar per acre from 80 as compared ith 40 pounds of nitrogen per acre, r from 90 as compared with 60. hese results are in good agreement ith the joint fertilizer recommenations of the U. S. Department of griculture and the Louisiana Exeriment Station, which advise the se of 40 to 60 pounds of nitrogen er acre on plant cane on light soil.

Data for rate-of-nitrogen experients on first-stubble cane are given tables 5-7, and for second-stubble ane in tables 8 and 9.

Table 5 gives data showing the ffects of 80 and 120 pounds of nirogen per acre on light soil in 3 agonomy outfield variety experiments. ields of cane and sugar per acre ere significantly increased at only of the 3 locations. Data are based n 32 replications of the nitrogen reatments.

Table 6 gives data showing the ffect of 80 and 120 pounds of nitroen per acre on light soil on Ranch lantation. Yields of cane and sugar per acre were not significantly increased by 120 as compared with 80 pounds of nitrogen.

Data showing the effects of 4 rates of nitrogen on Mhoon silty clay loam on the Houma Station are given in table 7. Average data show significant increases in yields of cane and sugar per acre from the use of 40 pounds of nitrogen per acre as compared with no nitrogen, and from 80 pounds of nitrogen per acre as compared with 40 pounds per acre. Yields of cane and sugar per acre from 120 pounds were not significantly higher than from 80 pounds of nitrogen per acre.

Table 8 gives data showing the effect of 80 and 120 pounds of nitrogen per acre on light soil in 2 of the agronomy outfield variety tests. Yields of cane or sugar per acre were not significantly increased by the use of 120 pounds as compared with 80 pounds of nitrogen per acre. Data for these 2 experiments are based on 34 replications of the nitrogen treatments.

Data from an experiment on Mhoon silt loam on the Houma Station, using 4 rates of nitrogen, are given in table 9. Yields of cane and sugar per acre were increased significantly by

**TABLE 8**
**Effects of 80 and 120 pounds of nitrogen per acre on light soil [1]**
**(Averages for second-stubble cane of 17 varieties)**
**1958**

| Plantation and ate of harvest | Nitrogen per acre | Crusher-juice analysis | | | Cane per acre | Sugar per acre |
|---|---|---|---|---|---|---|
| | | Brix | Sucrose | Purity | | |
| | Pounds | | % | % | Tons | Pounds |
| Bon Secour | 80 | 15.95 | 12.68 | 79.50 | 14.95 | 2,521 |
| 10-20-58 | 120 | 15.64 | 11.97 | 76.53 | 16.17 | 2,522 |
| Oaklawn | 80 | 15.65 | 12.39 | 79.17 | 17.13 | 2,856 |
| 10-28-58 | 120 | 15.27 | 12.01 | 78.65 | 17.58 | 2,843 |
| Average | 80 | 15.80 | 12.54 | 79.37 | 16.04 | 2,688 |
| | 120 | 15.46 | 11.99 | 77.55 | 16.88 | 2,682 |

[1] Agronomy variety test fields.
Yield differences due to nitrogen treatment were not significant.

the use of 40 pounds as compared with no nitrogen, and almost significantly by 120 pounds as compared with 40 pounds of nitrogen per acre.

A summary of the 8 rate-of-nitrogen experiments on stubble cane showed significant increases in yiel of cane and sugar per acre from 1 pounds as compared with 80 poun of nitrogen in only 1 experimer These data are in excellent agre ment with the joint fertilizer reco

TABLE 9
HOUMA STATION
Houma, La.
Second stubble—1958

Mhoon silty clay loam — Four varietie

| Nitrogen per acre (pounds) | Crusher-juice analysis | | | Cane per acre | Indicated available 96° sugar at harvest | |
|---|---|---|---|---|---|---|
| | Brix | Sucrose | Purity | | Per ton of cane | Per acre |
| | | % | % | Tons | Pounds | Pounds |
| | | | C.P. 44-101 | | | |
| 0 | 14.31 | 10.37 | 72.47 | 18.34 | 130.3 | 2,390 |
| 40 | 14.54 | 10.77 | 74.07 | 24.94 | 137.3 | 3,424 |
| 80 | 14.02 | 9.94 | 70.90 | 25.61 | 123.1 | 3,153 |
| 120 | 14.39 | 10.03 | 69.70 | 26.88 | 122.7 | 3,298 |
| | | | C.P. 36-13 | | | |
| 0 | 13.87 | 10.09 | 72.75 | 11.29 | 129.6 | 1,463 |
| 40 | 14.37 | 10.66 | 74.18 | 13.74 | 138.7 | 1,906 |
| 80 | 15.29 | 11.98 | 78.35 | 17.70 | 161.2 | 2,853 |
| 120 | 14.86 | 10.88 | 73.22 | 17.47 | 140.4 | 2,453 |
| | | | C.P. 48-103 | | | |
| 0 | 15.31 | 12.03 | 78.58 | 17.34 | 162.2 | 2,813 |
| 40 | 15.84 | 12.47 | 78.72 | 23.10 | 168.3 | 3,888 |
| 80 | 15.82 | 12.35 | 78.06 | 23.05 | 165.8 | 3,822 |
| 120 | 16.59 | 13.38 | 80.65 | 24.74 | 183.1 | 4,530 |
| | | | N.Co. 310 | | | |
| 0 | 13.47 | 9.60 | 71.27 | 19.53 | 119.3 | 2,330 |
| 40 | 14.01 | 10.08 | 71.95 | 25.08 | 126.1 | 3,163 |
| 80 | 14.84 | 11.17 | 75.27 | 25.86 | 143.9 | 3,721 |
| 120 | 14.26 | 10.31 | 72.30 | 25.80 | 129.4 | 3,339 |
| | | | Averages | | | |
| 0 | 14.24 | 10.52 | 73.88 | 16.62 | 135.3 | 2,249 |
| 40 | 14.69 | 11.00 | 74.88 | 21.72 | 142.5 | 3,095 |
| 80 | 14.99 | 11.36 | 75.78 | 23.06 | 146.9 | 3,387 |
| 120 | 15.02 | 11.15 | 74.23 | 23.72 | 143.5 | 3,405 |
| L.S.D. for averages only (.05) | | | | 1.70 | | 317 |
| L.S.D. for averages only (.01) | | | | 2.28 | | 426 |

Data, except averages, are averages of 3 plots, each 3 rows wide and 26 fee long. Fertilized April 30, 1958; harvested October 29, 1958.

ıendations (for nitrogen), which ıdvise the use of 80 to 100 pounds of trogen per acre on stubble cane.

*-P-K experiments:*

Studies of the effects of complete ixtures as compared with nitrogen one were included in 3 experiments ı plant cane, 2 on first stubble, and on second stubble. Averages for ıe 6 tests show only a small differ- ıce between these two treatments in ercent sucrose.

Data for the 3 plant-cane tests ables 2, 3, and 10) show nonsig- ificant increases in yields of cane ıd sugar per acre from the com- ete mixtures as compared with ni- ogen alone. Data for the first- and cond-stubble experiments (tables 6 ıd 10) show significant increases in yields of cane and sugar per acre from the use of complete mixtures as compared with nitrogen alone.

These data are in good agreement with the joint fertilizer recommendations (for phosphate and potash), which advise the use of complete mixtures only on stubble cane, and where known deficiencies of phosphate and potash exist.

Fertlizer recommendations were prepared jointly by the U. S. Department of Agriculture and the Louisiana Agricultural Experiment Station, and published in the March 1, 1959, issue of *The Sugar Bulletin.*

*Variety x Nitrogen x R.S.D. Interactions:*

The first-stubble experiment on the Houma Station (table 7) was

**TABLE 10**
**OAKLAWN PLANTATION**
**Franklin, La.**
**1958**

**Baldwin silt loam**

| ertilizer treatments N - $P_2O_5$ - $K_2O$ (pounds per acre) | Crusher-juice analysis | | | Cane per acre | Indicated available 96° sugar at harvest | |
|---|---|---|---|---|---|---|
| | Brix | Sucrose | Purity | | Per ton of cane | Per acre |
| | | % | % | Tons | Pounds | Pounds |
| **N.Co. 310 plant cane** | | | | | | |
| 60-0-0[1] | 17.21 | 14.21 | 82.57 | 28.19* | 193.2 | 5,446* |
| 60-25-40[2] | 17.16 | 14.18 | 82.63 | 28.75* | 192.9 | 5,546* |
| **N.Co. 310 first stubble** | | | | | | |
| 90-0-0[1] | 16.96 | 13.65 | 80.48 | 29.13 | 183.0 | 5,331 |
| 90-40-60[2] | 17.20 | 14.09 | 81.92 | 30.52 | 190.7 | 5,820 |
| L.S.D. (.05) | | | | 1.05 | | 341 |
| L.S.D. (.01) | | | | N.S. | | 463 |
| **C.P. 44-101 second stubble** | | | | | | |
| 90-0-0[1] | 16.61 | 13.56 | 81.64 | 20.85 | 183.2 | 3,820 |
| 90-40-60[2] | 16.68 | 13.47 | 80.76 | 22.86 | 180.9 | 4,135 |
| L.S.D. (.05) | | | | 1.08 | | 269 |
| L.S.D. (.01) | | | | 1.52 | | N.S. |

[1] Aqua ammonia.
[2] Flo-Mix.
* Yields of cane or sugar per acre did not differ significantly.

Data for each test are averages for 12 or 13 plots, each 3 rows wide by the ength of the cut. Fertilized May 7-8, harvested November 12-14, 1958.

designed to study the comparative effects of high nitrogen applications on yields of healthy and ratoon-stunting - diseased C.P. 44-101 and C.P. 43-47. Data indicated that the nitrogen response of healthy and diseased cane was about the same. Yield differences in favor of healthy cane amounted to 1.63 tons of cane and 144 pounds of sugar per acre. The diseased cane produced a higher yield of sugar per ton, amounting to 6.7 pounds. This is in agreement with results reported by C. A. Schexnayder, formerly Pathologist at the U. S. Sugarcane Field Station, Houma, L

*Variety x Nitrogen Interaction E periments:*

A study designed to determine t relative varietal response to nitrog of important commercial and pro ising unreleased varieties, was i cluded in 11 experiments. No i portant variety x nitrogen intera tions were found. The average r sponses to nitrogen of 5 commerci varieties are shown in table 11. T comparative yield increases of t 5 varieties are not significant.

**TABLE 11**

**Comparative yield increases of selected varieties from applications of 40 and 80 pounds of nitrogen per acre in plant cane, and 80 and 120 pounds in first stubble. Top figure in each group of three is for the lower rate; second is for the higher; third shows gain (or loss) due to the higher rate.**

**(Averages for 17 plant-cane and 14 first-stubble tests)**

| Variety | Plant cane | | First-stubble cane | | Combined tests | |
|---|---|---|---|---|---|---|
| | Cane/ acre | Sugar/ acre | Cane/ acre | Sugar/ acre | Cane/ acre | Sugar/ acre |
| | Tons | Pounds | Tons | Pounds | Tons | Pounds |
| C.P. 44-101 | 27.02 | 4,955 | 28.33 | 5,255 | 27.61 | 5,090 |
| | 28.64 | 5,134 | 30.79 | 5,527 | 29.61 | 5,311 |
| | 1.62 | 179 | 2.46 | 272 | 2.00 | 221 |
| C.P. 36-105 | 26.49 | 4,770 | 25.95 | 4,836 | 26.25 | 4,800 |
| | 26.81 | 4,693 | 27.78 | 5,025 | 27.25 | 4,843 |
| | .32 | -77 | 1.83 | 189 | 1.00 | 43 |
| C.P. 44-155 | 24.44 | 4,657 | 24.49 | 4,632 | 24.46 | 4,646 |
| | 26.11 | 4,945 | 24.09 | 4,536 | 25.20 | 4,760 |
| | 1.67 | 288 | -.40 | -96 | .74 | 114 |
| C.P. 48-103 | 23.02 | 5,074 | 24.58 | 5,613 | 23.72 | 5,317 |
| | 23.06 | 5,093 | 24.43 | 5,426 | 23.68 | 5,243 |
| | .04 | 19 | -.15 | -187 | -.04 | -74 |
| N.Co. 310 | 28.59 | 5,446 | 30.65 | 5,662 | 29.52 | 5,544 |
| | 29.96 | 5,572 | 31.82 | 5,753 | 30.80 | 5,654 |
| | 1.37 | 126 | 1.17 | 91 | 1.28 | 110 |
| Means | 25.91 | 4,980 | 26.80 | 5,200 | 26.31 | 5,079 |
| | 26.92 | 5,087 | 27.78 | 5,253 | 27.31 | 5,162 |
| | 1.01 | 107 | .98 | 53 | 1.00 | 83 |

## UP FRONT

(Continued from page 135)

weight of a truck-tractor fully equipped for service (not including trailer or semi-trailer) is less than 5,500 pounds, no tax is due. If the actual unloaded weight of a single unit truck fully equipped for service is less tha 13,000 pounds, no tax is due.

The above has always been t understanding of the League and h been recently confirmed with the I ternal Revenue Service at New O leans.

## WASHINGTON

(Continued from page 137)

ught at prices above the world mar-
t." Perhaps that implied threat
ised some of Castro's advisors to
e thought to what would happen
the economy of their country if
S. purchases of Cuban sugar were
pped. Anyway, now that the time
drawing near when this Congress
ll have to either extend the pres-
t Sugar Act or amend it, the Cu-
n government has sent a note of-
ring to appoint a commission to
nfer with U. S. officials ostensibly
iron out the difficulties of the
stro regime with this country.

Even if the Cubans talk sense,
hich we doubt, the conferences un-
ubtedly will be long drawn out,
rticularly if our Department of
ate maintains its apologetic atti-
de toward Castro.

The fact that the President of the
nited States is on a ten day tour
Latin America may provide the
vernment with still another excuse for delaying affirmative action on sugar legislation until his return.

If our Chief Executive would get as mad at some of his hired boys in the State Department as he does when newspaper reporters question him on our missile program, sugar legislation would get off the sidetrack on to the main line—fast!

———o———

## IN THE FIELD

(Continued from page 136)

This is an opportunity for growers to hear first-hand from the scientists who actually do the research work on sugar cane. Attend this meeting; ask questions, and discuss the sugar cane problems.

Mosaic disease is on the increase. Learn how to control this threat. A chemical method of roguing Mosaic diseased plants from the field will be thoroughly discussed; many other aspects of this disease will be presented.

The sugar cane borer is still present. Come in to learn of the new in-

*GET DEPENDABLE CONTROL WITH*

**CHIPMAN**

**WEED & GRASS KILLERS**

**2, 4-D AMINE:** For selective spraying of Johnson grass seedlings; also alligator weed and other susceptible broadleaved weeds in sugarcane. Applied spring and fall.

**ATLACIDE:** The safer chlorate . . . kills Johnson grass; other weeds and grasses along headlands, in ditches and other non-crop areas. Backed by years of outstanding results. Applied as a spray.

**SODIUM TCA:** For control of Johnson grass in sugarcane.

*Write for Information*

**CHIPMAN CHEMICAL CO.** Box 272 D
Pasadena, Texas

formation on borer control with Endrin and other new chemicals being tested.

New studies have already begun in fertilizer research. Plant tissue analysis and the use of radioactive tracer elements will be used to further the information on the uptake of plant food by the cane plant.

The sugar cane breeding program is always important. New varieties are the life-blood of this industry. There are may thousand new seedlings produced each year. The promising new released varieties and the new selections made most recently will be discussed. The purpose of some of the new sugar cane crosses made will be of interest to many.

Every bit of information can be used advantageously by cane producers. Don't miss this opportunity to learn more about sugar cane.


FOR SALE

Engersol-Rand Air Compressor

125 C.F.M. Motor, Starter

No reasonable offer refused

PACIFIC MOLASSES CO.

3036 Chartres St., New Orleans 17, La.

WHitehall 3-6682



*"Sugar Factory Insurance Specialists"*

**GILLIS, HULSE and COLCOCK, Inc.**

839 Union St. New Orleans, La.

Telephone JA 2-1225



Commercial Members

of the

AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC

AMERICAN MOLASSES CO., OF LOUISIANA, INC.
400 N. Gayoso St.
New Orleans, La.

HARRY L. LAWS & CO., INC.
126 Carondelet Street
New Orleans 12, La.

THE HIBERNIA NATIONAL BANK
New Orleans, La.

LAMBORN & COMPANY, INC.
Whitney Building
New Orleans, La.

LEBOURGEOIS BROKERAGE CO.
823 Perdido Street
New Orleans, La.

THE NATIONAL BANK OF COMMERCE
New Orleans, La.

NATIONAL SUGAR REFINING CO
Carondelet Bldg.
New Orleans, La.

PENICK & FORD LTD., INC.
National Bank of Commerce Bldg.
New Orleans, La.

ESSO STANDARD OIL COMPANY
(Louisiana Division)
P. O. Box 1250 New Orleans 10, L

STANDARD SUPPLY & HARDWAR CO., INC.
822 Tchoupitoulas St.
New Orleans, La.

STATE AGRICULTURAL CREDIT CORP., INC.
837 Whitney Building
New Orleans, La.

WHITNEY NATIONAL BANK
New Orleans, La.

Chemistry Library,
Louisiana State University,
University, Station
Baton, Rouge, La.
(3)

# THE SUGAR BULLETIN

38—No. 12 MARCH 15, 1960

*ial Bulletin of the American Sugar Cane League of the U. S. A.*

PRINTED ON PAPER MADE FROM
LOUISIANA SUGAR CANE BAGASSE

## *In This Issue*

In The Field With Lloyd L. Lauden ..... 151
**League Appropriates More Money For Cane Harvester Research**

Up Front With The League ..... 152
**Sales Tax On Repairs To Certain Equipment—Position Wanted**

In Washington With Joe Ferris ..... 154
**Who Will Fill America's Sugar Bowl Tomorrow?—The Zero Hour**

Recommendations For Controlling The Sugarcane Borer And Other Pests ..... 155

Recommendations For The Control Of Mosaic Disease In Sugarcane In Louisiana For 1960 ..... 157

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry

THE
# SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Edit

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

**Issued on the 1st and 15th of each month.** **Subscription: Member 50 cents a year. Non-Members $3.00 a year.**

**Washington Office, 510 Union Trust Bldg., Washington, D. C.**
**Josiah Ferris, Manager**

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
W. F. Giles, Jeanerette, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

# IN THE FIELD WITH LLOYD LAUDEN

*by Lloyd L. Lauden*

### eague Appropriates More Money For Cane Harvester Research

A $10,000 fund has been appropri- ed by the American Sugar Cane eague for special research on the . S. D. A. experimental harvester. he research is aimed primarily to- ard the development of a better ck-up attachment and a better cane eaning device.

The newly appointed Farm Ma- inery Steering Subcommittee, com- osed of Mr. Roland Toups, of Hou- a; Mr. Charles Savoie, of Belle ose; Mr. Clay Terry, of Franklin; nd Mr. M. V. Yarbrough, Youngs- lle, will meet regularly with Mr. ussell Ramp, Engineer, U. S. D. A., both the conference room and in ie work shop to discuss and plan ays and means of accomplishing is goal. The committee is aware at the job is not an easy one and erefore this committee respectfully equests suggestions and criticisms om everyone in the Louisiana cane dustry. If anyone has a suggestion n how to develop a better pick-up ttachment or cane cleaning device the harvester, please address the ggestion to Mr. Roland Toups, hairman of the committee.

The Farm Machinery Steering ubcommittee has had several meet- gs this year. At a recent meeting eld in the work shop at the Houma tation, several materials, including evolving rubber stripper fingers, ere considered for removing trash n the cane cleaning device. Consid- ration was given to the size, shape, lacement, and adjusting of the cleaning cylinder. The use of small chains attached to a revolving drum was mentioned. Chains attached to a revolving drum have been used successfully to remove bark from fence posts. The use of variable speed drives on the cane cleaning device is being considered.

The use of vertical lift chains or belts placed several feet behind the points of the gatherer arms and mounted near each side of the top of the row was considered for use on the pick-up attachment for picking up cane lodged parallel with the row. Cane lodged parallel to the row is much more difficult to pick up than cane lodged across the row middle. Much emphasis is now being given to picking up this type of lodged cane.

A good cane cleaning device to the harvester would be of great benefit to the industry. Such a device, if generally used, would not only tend to standardize trash at a low level on cane during good as well as adverse weather conditions, but it would also reduce hauling cost, make neater and more compact bundles, make planting easier if used to cut seed cane, and make fire in the fields unnecessary.

A pick-up attachment that will more satisfactorily and more rapidly pick up can lodged parallel to the row as well as cane lodged across the middles will also be of benefit to the industry. Such a device, if perfected, will reduce the labor requirements during harvest and increase

(Continued on page 159)

# UP FRONT WITH THE LEAGUE

*by A. W. Dykers*

## Sales Tax on Repairs to Certain Equipment

*The Sugar Bulletin* of September 1, 1959 and October 15, 1959, contained information relative to the exclusion from the Louisiana Sales Tax of amounts paid to a repair shop for repairs to certain equipment. The exclusion is applicable to equipment which has been placed on a tract of land for its service and improvement, when the land and the equipment belonged to the same owner. Under such conditions the equipment becomes immovable by destination under Article 468 of the Louisiana Civil Code, and repairs to immovable property are excluded from the sales tax. To assist in understanding the exclusion, The Bulletin of October 15, 1959 contained certain questions and answers and also a form of certificate to be furnished by the owner to the repair shop in order to be entitled to the exclusion.

The form of certificate suggested was designed for attachment to the repair shop's invoice. Many of the repair shops have taken the position that they should receive the certificate in advance of submitting the invoice. As stated in The Bulletin of October 15, 1959, although no tax is due on such repairs, the repair shop is obligated to pay the sales tax on its costs of parts and materials used in making the repairs. The repair shop may desire to include this amount in its charge for materials and parts used in making the repairs, just as it includes any other cost. The repair shops point out, if the certificate is not furnished until after the invoice is submitted, they are deprived of the opportunity to include this amount. Therefore, it is proper to furnish the certificate to the r pair shop in advance. This has be confirmed with the Sales Tax Div sion of the State Department of Re enue.

In view of the above, addition suggested forms of certificates ha been worked out by the League collaboration with representatives certain repair shops and with t Louisiana Department of Revenu The forms are on page 153.

The "Special" certificate form co ers one repair job. The "Genera certificate form covers repairs to a equipment to be ordered from a pa ticular repair shop, and avoids t necessity of furnishing addition certificates.

The owner of the equipment shou be careful in signing either of the forms to be certain the facts certifi to fit his particular case. The own should be particularly careful in u ing the General Form to be certa that any repairs ordered thereaft are either to be performed on e cluded equipment, or give notice the repair shop that the particul repairs are not. If the facts do n fit the certificate, the owner is n entitled to the exclusion and owes t tax.

In terms of net savings, this excl sion means on all amounts paid to repair shop for repairs to equipme which can be properly certified, t equipment owner saves the full sal tax on that part of the repair charg which represents labor, and al saves the tax on the difference b tween the repair shop's cost and i retail price of parts and materia

(Continued on page 159)

"SALES TAX EXEMPTION CERTIFICATE (SPECIAL)

TO _____
_____, Louisiana

The undersigned certifies that the above (or attached) order is for repairs to equipment or machinery owned by the undersigned, which equipment or machinery was placed on land owned by the undersigned for its service and improvement, within the meaning of Article 468 of the Louisiana Civil Code, and will continue to be so used. This certificate is furnished to establish an exclusion from the Louisiana Sales Tax of the repairs referred to above, and the undersigned assumes any legal responsibility under the Sales Tax Law resulting from your relying on this certificate.

_____
Owner's Signature

_____
Owner's Address

_____
Date

SALES TAX EXEMPTION CERTIFICATE (GENERAL)

TO _____
_____, Louisiana

The undersigned certifies that he (it) owns equipment and machinery which is or has been placed by the undersigned on land also owned by the undersigned for the service and improvement of said land, within the meaning of Article 468 of the Louisiana Civil Code, and will continue to be so used. Unless you are notified by the undersigned to the contrary, any repairs to equipment or machinery ordered by the undersigned will be for equipment or machinery referred to in the preceding sentence. This certificate is furnished to establish an exclusion from the Louisiana Sales Tax of the repairs referred to above, and the undersigned assumes any legal responsibility under the Sales Tax Law resulting from your relying on this certificate.

_____
Owner's Signature

_____
Owner's Address

_____
Date"

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*

## Who Will Fill America's Sugar Bowl Tomorrow?

Mr. Robert H. Shields, President and General Counsel, United States Beet Sugar Association, addressed the Sugar Club of New York at a luncheon meeting March 8th. The subject of Mr. Shield's remarks was —"Who Will Fill America's Sugar Bowl Tomorrow?"

In his talk Mr. Shields analyzed the new uncertainties injected into the U. S. Sugar supply picture by the mounting tensions between this country and Cuba. "The ominous and unresolved Cuban situation is projecting in our own country today widespread questioning about whether the U. S. sugar program will be able to fill America's sugar bowl tomorrow." He said—"the policies of the present Cuban government are raising questions as to whether Cuba will be able in the future to continue as the largest supplier in both the American market and in the so-called 'world market'; also if able to do so whether Cuba will be willing, and whether she should be permitted to continue her past role in the American market. These questions are prompting reappraisals of the sugar marketing system throughout the globe."

Mr. Shields said that while conditions are currently too fluid for a major overhauling of the U. S. sugar program, the present Sugar Act should not be extended without certain changes. If the Act were extended without any changes at all it would —"leave one-third of our sugar supply jeopardized by a government that appears to be getting closer and clos into the Soviet orbit."

Presidential authority to readju foreign quotas, Mr. Shields sa would provide an effective emerge cy tool urgently needed for deali with Castroism.

Should Cuba not continue as substantial supplier to the U. S. Su ar market, for any reason, Americ consumers need fear no supply sho age. According to Mr. Shields, t diversity of supplying areas both fo eign and domestic assures adequa filling for the "National Sugar Bow

## The Zero Hour

Government spokesmen say the A ministration plans to send to Co gress about March 18th, its propos to amend and extend the Sugar A The Administration's Sugar Bill w contain the provisions outlined in t February 15, 1960 issue of the Sug Bulletin.

In addition to carefully analyzi Cuba's willingness and ability to co tinue to supply her U. S. Sugar quot Congress will undoubtedy take close look at the effect of Cuba's su ar commitment to Russia at pric well below those guaranteed by th country. According to some sug experts who have studied the Sovie Cuba deal, Cuba may find that i stead of getting a hundred millio dollar sugar credit from Russia, s is actually giving the Soviet Union huge loan at very cheap interest, to b repaid at Russia's convenience.

As the time approaches when Co gress will consider sugar legislatio anti-American sentiment in Cuba

(Continued on page 159)

# ECOMMENDATIONS FOR CONTROLLING THE SUGARCANE BORER AND OTHER PESTS*, LOUISIANA - - 1960

The sugarcane borer, *Diatraea saccharalis* (F), is the most important insect pest attacking sugarcane in Louisiana. The following recommendations are made for its control:

## Chemical Control

Insecticides should be applied when the borer infestation and potential value of the crop are sufficient to insure a reasonable profit from treatment. Chemical control of *first generation* borers is not recommended under the prevailing conditions of a heavy, widespread infestation.

*Insecticides to use*—Endrin is recommended for sugarcane borer control. A granular formulation containing two per cent endrin on 30-60 mesh, RVM-AA attapulgite should be used at the rate of 12 pounds per acre per application.

Endrin granules should be applied at 14-day intervals. Four applications should be made, provided the last application can be made at least 5 days before harvest.

Granules may be applied by airplane at any time during the day provided wind conditions are relatively calm. The swath width should never be wider than the wingspread of the airplane. Marking of swaths by flagging is essential. The airplane should be flown at a height that will insure uniform coverage.

Care should be taken to prevent contamination of streams and ponds since endrin is highly toxic to fish.

Where bagasse or field trimmings will be used for livestock feed or where livestock will be pastured in the fields for weed control, ryania dust should be used instead of endrin.

*When to start*—The first insecticide application should be made only after joints have begun to form and when at least two per cent of the plants are infested with young larvae which have not yet bored into the stalk. This condition will usually prevail between June 10th and 30th in the southern part of the sugar belt, and between June 15th and July 5th in the northern part. Fields should be checked at weekly intervals from June 1 until August 25 to insure proper timing of applications.

Fields should be checked in the following manner. Examine at least six samples in each field. These samples should be approximately the same distance apart and taken along a diagonal across the field (Fig. 1). Each sample should consist of 50 randomly selected stalks, one stalk selected (without looking) from each of 50 locations one step apart along a single row of cane. Examine all 50 stalks for any external signs of borer feeding. Carefully dissect only those stalks which have recent feeding signs to determine whether or not young borers are present. The first insecticide application should be made when two per cent of the plants (i.e. an average of one stalk per sample) are found with young larvae which have not yet bored into the stalk.

## Biological Control

There is no convincing evidence to show that a definite profit in dollars and cents will result from the release of parasites. It is possible that *Trichogramma* parasites may aid in suppressing the borer population late in the season, but high parasite populations also occur in fields where no parasite releases are made.

## Cultural Practices

Cultural practices are normal farming operations which can be used to help reduce insect damage. They are helpful but not sufficient to control the sugarcane borer. It is common sense to employ the following mea-

(Continued on next page)

* The recommendations given here were epared by state and federal entomolosts and are based upon the results of periments conducted by the Louisiana gricultural Experiment Station and the ugarcane Station of the Entomology Reearch Division, Agricultural Research ervice, U. S. Department of Agriculture.

sures when and where it is practical to do so:

1. Plant borer-free cane.
2. Break old fields in the fall or early spring.
3. Harvest heavily infested cane as soon as possible.
4. Cut cane close to the ground during harvest.
5. Do a thorough job of burning cane trash.
6. Scrap thoroughly for field clean-up.
7. Shave heavily infested summer or fall planted cane and destroy plants by burning and wrapping during the winter.
8. Chopping and wrapping of middles may destroy many of the borers overwintering in cane trash.

### Resistant Varieties

Some varieties of sugarcane have demonstrated an ability to withstand or escape injury better than others. However, it is doubtful if any of our present varieties could escape appreciable injury for long under conditions of high borer pressure. The use of relatively resistant varieties where they are adapted or otherwise desirable may tend to alleviate the bore problem and sometimes decrease th total acreage that will require insect cide treatment.

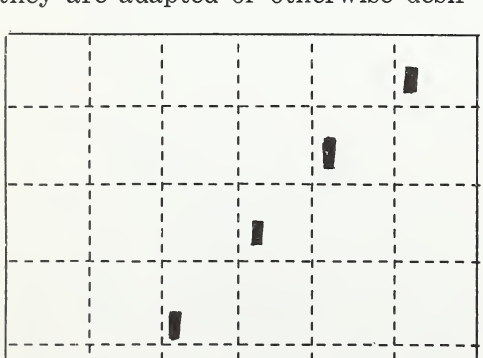


Fig. 1: Diagram of sugar cane field showing how examinations should be made for borer infestation. Heavy lines represent 50 steps where each sample should be taken; broken lines represent drainage ditches, field roads, etc.

The following varieties are groupe according to their relative sucept bility to borer damage.

Moderately resistant, variety N Co. 310.

Average to Susceptible, varitie C.P. 43-47, C.P. 36-105, C.P. 4 155, C.P. 48-103, C.P. 47-193, C.I 36-13, C.P. 29-116, C.P. 44-10 C.P. 52-68.

### Borers On Corn

Corn should be planted as early a possible to avoid injury from th sugarcane borer since late plante corn may be severely injured.

Corn should be planted as far a possible from sugarcane since borer often move from cane to corn an back to cane.

### Soil Pests

Soil treatment with chlordane recommended to control such pests a springtails, bristletails, symphyli and millipedes in heavy soils ar wireworms in sandy soils of the can growing area of Louisiana. Sc treatment should be made only whe these pests are known to be a pro lem.

Apply chlordane at planting tin on the cane seed pieces in the op furrow shortly before covering wi soil. Apply 2 pounds of technical m terial per acre either as a spray a dust.

An emulsifiable concentrate wettable powder may be used f spray applications. However, t emulsifiable concentrate is to be pr ferred if available spray equipme does not have an agitator. It mix more readily with water and is le likely to clog spray nozzles. *Do n use chlordane oil solution since t oil will harm the cane.* Apply at lea 10 gallons of water per acre in band 12 to 16 inches wide so that the seed pieces will be covered.

If dust is used, apply 100 pour of a 2% dust per acre. A fertili

# COMMENDATIONS FOR THE CONTROL OF MOSAIC DISEASE IN SUGARCANE IN LOUISIANA FOR 1960

*repared jointly by Pathologists of the Louisiana State University Agricultural Experiment Station, Baton Rouge, and the U. S. Department of Agriculture Sugarcane Field Station, Houma*

Mosaic is becoming more prevalent the sugarcane district of Louisi-a, and is now present generally roughout the Bayou Lafourche and ssissippi River areas, with infec-n in excess of 25 percent occurring some fields. Only traces of mosaic ve been found in the Teche, West-a, and Bunkie areas.

The varieties C. P. 44-101, N. Co. ), and C. P. 52-68, which comprise proximately 70 percent of the sug-ane acreage in Louisiana, are sus-ptible to mosaic. The disease re-ces yields of cane. In field experi-nts conducted over a period of 3 ars comparing 100 percent mosaic-ected with healthy seed cane, yields cane were reduced on an average follows: C. P. 44-101, 35 percent; P. 52-68, 33 percent; and N. Co. ), 16 percent. Part of the loss in lds results from reduction in ger-nation of both plant cane and stub-.

Mosaic is carried in seed cane that taken from infected plants and is read from diseased to healthy cane aphids, or plant lice. Therefore, is important that fields to be used seed cane be free of the disease. The following are recommendations control of mosaic:

1. Learn to know the symptoms you can identify the disease if it curs in your fields.

2. Survey in early spring the fields u expect to use for seed. This ould be done as soon as stands are ll established and the leaves show cold injury. This may be in early ril or as late as May, depending on the season. Choose fields for seed where there is no mosaic, if possible.

3. If you find mosaic, determine how much is present by counting the number of mosaic stools in a total of 100 consecutive stools along the row in at least 5 places in the field; make each count in a different row and in a different part of the field.

4. If not more than 2 percent of the plants in plant cane are mosaic, rogue the diseased plants by digging them out, or killing them by the use of the chemical Garlon (see paragraph 5 below). In digging, remove the entire seed piece on which a diseased plant occurs. Carry these plants out and destroy them. If left in the field, they may take root and serve as sources of spreading the disease. Repeat the inspection and roguing in such seed plots through May and June at about 2-week intervals. Roguing by digging is recommended only for plant cane; digging out stubbles is too expensive.

5. If seed cane is to be taken from stubble or summer plant cane (which is essentially stubble cane) and roguing is necessary, spray the diseased plants with the chemical Garlon, 1 gallon in 4 gallons of diesel fuel. Use of this material will be explained at your parish meeting.

6. If fields of any variety to be used for seed have more than 2 percent mosaic, obtain seed cane of that variety from sources free of mosaic. Consult your County Agent about this. The Committee on Mosaic Control is working on plans to make mo-

(Continued on next page)

---

tributor has been found satisfac-y for applying dust.

*AUTION:* Endrin and chlordane e poisonous. Handle with care. llow directions and heed all pre-cautions on container labels.

*Louisiana State University, Agricultural and Mechanical College, Division of Agricultural Extension, H. C. Sanders, Director*

saic-free seed of C. P. 44-101, N. Co. 310, and C. P. 52-68 available for purchase at a reasonable price from selected farms in different parts of the sugarcane district for the 1960 planting season.

7. Mosaic-free seed obtained by roguing or purchase should be planted as far removed as possible from fields known to be infected with the disease.

8. If you are growing N. Co. 310 and it is highly infected with mosaic, it may be desirable to discontinue planting this variety until mosaic can be reduced considerably or brought under control on your farm. Mosaic spreads more rapidly in this variety than in the other commercial varieties, and growing it where mosaic is prevalent will make it more difficult to control the disease.

9. On properties where there is a very high percentage of mosaic in all varieties, it is recommended that mosaic-free seed cane be obtained of the varieties C. P. 44-101 and C. 52-68; not N. Co. 310. This reco mendation is based on the fact th even though mosaic will spread ir a crop grown from healthy seed ca losses will be much less in plant a stubble than would be the case whe mosaic-diseased seed cane is used.

*"Sugar Factory Insurance Specialists"*

**GILLIS, HULSE and COLCOCK, Inc**

839 Union St. New Orleans, L

Telephone JA 2-1225

*GET DEPENDABLE CONTROL WITH*

# CHIPMAN

## WEED & GRASS KILLERS

**2, 4-D AMINE:** For selective spraying of Johnson grass seedlings; also alligator weed and other susceptible broadleaved weeds in sugarcane. Applied spring and fall.

**ATLACIDE:** The safer chlorate . . . kills Johnson grass; other weeds and grasses along headlands, in ditches and other non-crop areas. Backed by years of outstanding results. Applied as a spray.

**SODIUM TCA:** For control of Johnson grass in sugarcane.

*Write for Information*

**CHIPMAN CHEMICAL CO.** Box 272 D Pasadena, Texas

## THE FIELD

(Continued from page 151)

e capacity of the mechanical harster.

The U. S. D. A. experimental harster is a combine type machine. Its jective is to cut, clean, and load ne directly to the rear into wagons ing pulled by the harvester. The S. D. A. now has three large 4-heel type wagons for use with this rvester. When filled, the wagons e disconnected from the harvester the headland and tractors haul the agons to the mill. Three new front heel assemblies are being purchased r mounting on conventional cane agons. These sell for about $290.00 r assembly complete with tires and ill be tried this year with the exrimental harvester.

—o—

## WASHINGTON

(Continued from page 154)

creasing hourly. The government ntrolled radio, television and newspers are doing their utmost to use and vilify our government and officials who, unfortunately, have remain at their posts on the Island. ublic address systems erected at any of the principal street intercctions in Havana continuously are insults to the United States and citizens.

The "$64 dollar question" in the estern hemisphere is — How long ill Uncle Sam continue to take it, t only on both cheeks, but also on e seat of his pants?

—o—

## P FRONT

(Continued from page 152)

ing into repairs.

### Position Wanted

Roger M. Werniche, a 1939 graduate of the University of Florida with B.S. degree in Agriculture, has returned to the mainland from Hawaii d is seeking a position in Louisiana ther as a field superintendent or in search. Mr. Werniche is also interted in growing cane as a grower Company land or in purchasing ne acreage. His address is 3536 restone Blvd., Pensacola, Florida. rite to him for more particulars.


**Commercial Members**

**of the**

**AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC.**

AMERICAN MOLASSES CO., OF LOUISIANA, INC.
400 N. Gayoso St.
New Orleans, La.

HARRY L. LAWS & CO., INC.
126 Carondelet Street
New Orleans 12, La.

THE HIBERNIA NATIONAL BANK
New Orleans, La.

LAMBORN & COMPANY, INC.
Whitney Building
New Orleans, La.

LEBOURGEOIS BROKERAGE CO.
823 Perdido Street
New Orleans, La.

THE NATIONAL BANK OF COMMERCE
New Orleans, La.

NATIONAL SUGAR REFINING CO.
Carondelet Bldg.
New Orleans, La.

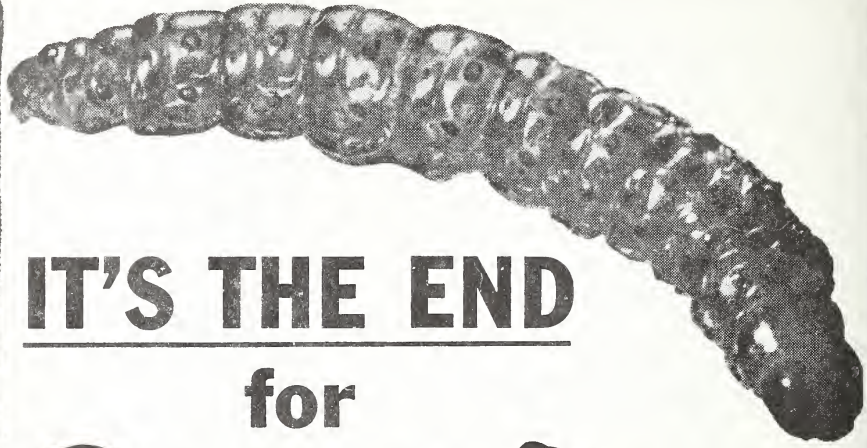
PENICK & FORD LTD., INC.
National Bank of Commerce Bldg.
New Orleans, La.

ESSO STANDARD OIL COMPANY
(Louisiana Division)
P. O. Box 1250 New Orleans 10, La.

STANDARD SUPPLY & HARDWARE CO., INC.
822 Tchoupitoulas St.
New Orleans, La.

STATE AGRICULTURAL CREDIT CORP., INC.
837 Whitney Building
New Orleans, La.

WHITNEY NATIONAL BANK
New Orleans, La.



# IT'S THE END for Sugar Cane Borer!

endrin

The days when sugar cane borer strikes and steals a lion's share of your hard-earned profits are over. You can fight back with endrin insecticide . . . it's the end for sugar cane borer.

Endrin has been thoroughly tested and approved for control of sugar cane borer. For best results, apply endrin granules by air.

Put an end to sugar cane borer damage this season. Use endrin! It's available from your insecticide dealer. Don't delay—see him today!

**SHELL CHEMICAL CORPORATION**

AGRICULTURAL CHEMICALS DIVISION

119 South Claiborne Avenue, New Orleans 12, Louisiana

SHELL

633.61
Su35
La. State University,
University, Station
Baton Rouge, La.
(3)
LOUISIANA STATE UNIVERSITY LIBRARY

# THE SUGAR BULLETIN

38—No. 13 APRIL 1, 1960

*ial Bulletin of the American Sugar Cane League of the U. S. A.*

PRINTED ON PAPER MADE FROM
LOUISIANA SUGAR CANE BAGASSE

## *In This Issue*

Up Front With The League ..... 163
**Sugar Legislation—Administration's Bill—Exchange Elects**

In The Field With Lloyd L. Lauden ..... 164
**Mosaic Disease—A New Sprayer**

In Washington With Joe Ferris ..... 165
**Sugar Legislation Stalls**

The Annual Address Of F. A. Graugnard, Jr., President Of The Louisiana Sugar Exchange, Inc. ..... 166

Production Of Sugar By Type 1959 Louisiana Crop ..... 168

Production Of Molasses And Syrup 1959 Louisiana Crop ..... 168

Official Raw Sugar Prices 1959-60 Pricing Period ..... 169

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry

THE
# SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Edito

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

**Issued on the 1st and 15th of each month.** **Subscription: Member 50 cents a year. Non-Members $3.00 a year.**

**Washington Office, 510 Union Trust Bldg., Washington, D. C.**
**Josiah Ferris, Manager**

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
W. F. Giles, Jeanerette, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

# UP FRONT WITH THE LEAGUE

*by A. W. Dykers*

## Sugar Legislation

As you will glean from the report f Joe Ferris in this issue, the very ble manager of the League's Wash- ngton office is having his troubles /ith sugar legislation.

A few weeks ago Joe was ailing. n addition to the usual virus dis- resses he claimed that a hive of bees ad settled in one of his ears and a lacksmith in the other and that he idn't feel too good. Now comes this ugar Act rumpus.

We hope that Joe has recovered rom his recent indispositions. It is nough to have to listen to the noises enerated hither and yon about the ugar Act without being wired for tereo!

We print below the official Govern- nent release explaining the wishes of he Administration regarding sugar egislation.

## Administration's Bill

The Bill proposed by the Adminis- ration would accomplish the follow- ng objectives:

1. It would extend the Act for a eriod of four years, i.e., from De- ember 31, 1960 to December 31, 964. A four-year extension would ollow precedent and give farmers, he industry and sugar consumers a easonable period for forward plan- ing. (Sec. 4).

2. Marketing quotas would be in- reased by 50,000 tons for the main- and sugarcane area and 150,000 tons or the beet area.

This would be in compensation for omestic areas giving up their rights o Puerto Rican deficits.

During the past three years the mainland cane quota has on the aver- age received 40,000 tons and the best quota 130,000 tons through reallocations from Puerto Rico. By giving the two mainland areas fixed increases in their quotas in lieu of claims on future Puerto Rican deficits, mainland producers will be able to market consistently throughout the year and the eastern refiners can depend upon their supplies of raw sugar. (Sec. 1).

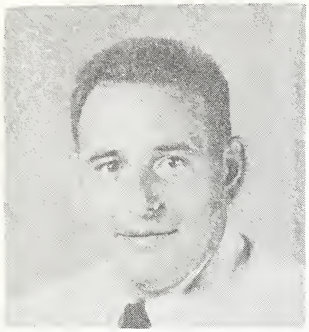
3. Section 2 of the proposed Bill would amend the provisions for reallocating to other supplying areas the deficits resulting from failures of producing areas to fill their quotas.

(a) Deficits from Puerto Rico or the Virgin Islands would be prorated 96 percent to Cuba and 4 percent to the full duty countries, to restore quotas to such countries on the same basis that they would lose quotas under Section 1. (par. 4).

(b) The deficit area provisions (Section 204 of the Act) would be rewritten for the purpose of simplification and clarification and of providing a better balance of supplies. Deficits from Hawaii, which ships to west coast and the Gulf would be prorated to the beet and mainland cane areas (par. 3); and deficits from the mainland cane area would be prorated to other domestic cane areas (par. 2).

(c) Section 204(c) of the Act would be amended by providing that quotas for foreign countries other than the Republic of the Philippines would be reduced in accordance with determinations of deficits by the Sec-

(Continued on page 170)



# IN THE FIELD WITH LLOYD LAUDEN

*by Lloyd L. Lauden*

## Mosaic Disease

Several articles have recently appeared in this publication giving detailed information on mosaic disease. This information not only covered the spread of this disease but gave facts and figures concerning losses that can be expected as a result of this disease and outlined control methods. Review the March 15 issue of *The Sugar Bulletin.*

Last year County Agents in most of the sugar belt held training meetings to teach growers how to identify mosaic disease and rogue out the diseased plants. As a result of these meetings many growers began control programs last year. These training meetings will probably be held again this year. Growers should begin checking fields as soon as stands are well established and after cold damage to leaves has disappeared.

Being shown the disease for the first time, many growers feel that the identification of the disease is very difficult. However, with the help of someone familiar with the disease symptoms, any grower or laborer with good eyesight can do a very satisfactory job of spotting the disease. Many growers were taught to identify and to rogue this disease in less than one-half hour at County Agents training meetings last year. Growers should be sure to attend these meetings this year.

Only fields to be used for seed cane are recommended for roguing. Roguing cane to be milled *is not* recommended, except in special instances. Growers who continue to rogue see cane over a number of years will r duce the level of infection in all the fields. A grower who has 1( acres of cane and it is infected wi mosaic disease should rogue abo 5 to 8 acres of cane each year. Th amount of seed should plant the cr each year. Select fields on the far which contain the lowest per ce mosaic disease. A check on the far will usually show that some fiel contain a very low amount of mosa while other fields of the same va ety may have more mosaic tha would be practical to rogue. Roguir fields which contain more than 2 p cent disease is not recommended u less the variety is very new or t amount of cane to be rogued is ve small. It is not easy and not pra tical to rogue heavily infected field

When a variety becomes too hea ly infected to be rogued on a far the purchase of a quantity of diseas free seed from elsewhere is reco mended. It is important to point o that this disease-free seed should checked for mosaic disease in t spring and rogued if the disease h entered this seed. Aphids or pla lice could have spread mosaic disea into the disease-free purchased se after planting.

Roguing diseased plants can done by either digging out the di eased stools or by spraying the d eased plants with Garlon, a chemic which kills the diseased stools. Che with the County Agent for roguir instructions.

(Continued on page 171)

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*

### Sugar Legislation Stalls

The Administration's proposed bill amend the Sugar Act was submitd to Congress by True D. Morse, cting Secretary of the U. S. Departent of Agriculture, on March 15, 960, but to this date, March 24, 960, the bill has not been introduced the House of Representatives, here it must be acted upon first ecause of its tax provision.

It was introduced in the Senate by enator Wallace Bennett (R.—Utah) r himself and Senators Allott, hurch, Fong, Young of North Dapta and Dworshak. It is No. S. 3210, nd it has been referred to the Comittee on Finance.

The feeling is prevalent here that ne Administration bungled when it ad the bill sent to Congress by the epartment of Agriculture, which is ot in good odor on Capitol Hill. In ast years sugar legislation has had ipartisan support and leaders of oth major political parties heretore have been invited to the White ouse to discuss the proposed legistion before the Chief Executive sent to Congress. This year, however, o Democrats and only four or five epublicans made the trip to 1600 ennsylvania Avenue; thus the Bill eceived a partisan label which nough it may not actually militate gainst it, certainly will do it no good. nfortunately for the first time in 's history, the sugar bill is labeled he administration's bill."

Representative Harold Cooley (D. -N.C.) Chairman of the House Comittee on Agriculture, which must handle any sugar legislation, has announced repeatedly during the past several months that he favors only a simple, one year extension of the present Act without any changes. Mr. Cooley has not changed his thinking. He reports that the majority of his committee will "go along" with him and he makes the very blunt statement that—"it will either be one year without change or nothing." The present Act expires next December 31st and Congress plans to adjourn prior to July 1st. Time is fast running out and Mr. Cooley's prediction of "one year or nothing" is food for serious thought by the domestic sugar industry.

When Representative Cooley first advocated a one year extension of the present Act a great many of his colleagues vigorously disagreed with him. They were, and still are resentful of the wild, irresponsible, unwarranted attacks by Castro upon the United States; the unlawful seizure of American owned property in Cuba and the official declaration of "economic" war on this country. But as time goes on it becomes increasingly evident that the hysterical statements and unlawful acts of the Castro regime are deliberately intended to goad Congress into a punitive policy. Mr. Cooley repeatedly has said that Congress should not change the sugar law in a manner which suggests the policy of reprisal. He says he is convinced that the political and economic situation in Cuba is rapidly nearing a crisis which will result in the overthrow of the Castro govern-

(Continued on page 171)

# ANNUAL ADDRESS OF F. A. GRAUGNARD, JR., PRESIDENT OF THE LOUISIANA SUGAR EXCHANG

Members of the Louisiana Sugar Exchange and our honored guests.

Today we come to the end of our fiscal year 1959-60 and, with your permission, I will briefly review a few of the happenings since March 25th, 1959, when you did me the honor of electing me President of the Louisiana Sugar Exchange.

The big news items of the year were the weather, the markets, and Castro—and all three were bad actors.

The production results were a classic example of the old adage that the crop is not made until it is in the bag. In spite of excessive rains during most of the cultivating season, a good crop seemed to be in the offing. The acreage in cane was about thirteen percent larger than that used for the previous crop and the prognosticators were arguing among themselves just before grinding began about how much *over* 500,000 tons of sugar the crop would produce. Then the weather man "lowered the boom".

Two severe freezes in early November changed the picture completely. Instead of enjoying a record production, we suddenly were battling to save as much of our cane as we could. W. M. Grayson, of the State ASC Office, estimates that the two freezes reduced the amount of cane ground by about 300,000 tons, and states that the early freezes made "selective harvesting" necessary. "Much credit" Mr. Grayson says, "must be given to research workers, the American Sugar Cane League, mill management, producers and others interested in the welfare of the industry who realized that a near crisis was impending and heroic measures were necessary".

I am happy to be able to report that not a single mill was forced to close down because of the lack of cane during the hectic days following the freezes and certainly agr with the opinion expressed by M Grayson that, and I quote, "It rather remarkable and certainly tribute to the new cane varieties sugarcane so painstakingly develop and released by the scientists a their co-workers in the Mainla Cane Area that sugar was still b ing made, seemingly without t many problems, six weeks after tv killing freezes".

As most everyone knows, the su ar production amounted to appro imately 440,000 tons, raw valu which was from a grinding of 5,07 611 net tons of cane. This was f short of the original estimates 500,000 tons, or better, of sugar, ra value, and was, in fact, some 2,3 tons less than the 442,793 tons sugar, raw value, produced by t 1958 crop from 4,868,908 tons of can

---

Taking its cue from the patte set by the crop, the raw sugar ma kets began the 1959-60 Pricing Pe od in high gear with an average 6.5170 dollars per hundred pounds raw sugar, delivered New Orlean prevailing after five weeks of t Pricing Period. Prices began weaken about the middle of Nover ber but, even with a drop to 5.9 for the week ending December 31s the season's average, with only fo weeks to go, was still an encouragi 6.3017. Then, down the "boon came again, this time aided and abe ted by the tirading Fidel Castro.

The average price of raw suga delivered New Orleans, for Janua 1960 dropped to 5.8205 cents a pou and this miserable January showi reduced the average price of ra sugar for the 16 week Louisia Pricing Period ending January 28 to 6.1819 cents—5 cents a hundr pounds less than the 1958-59 season average price of 6.2312.

Dr. Castro, and his Cuban beatnik

their efforts to ruin their own gar industry, are managing to dis- pt the sugar industry all over the rld. In his poem the "Masque of ndora" Longfellow wrote, "Whom e Gods Would Destroy They First ake Mad". We are waiting.

---

The "Freight differential" was in e spotlight again during the 1959- sugar pricing period. As you ow, this is the difference in the ean freight charges to transport a ndred pounds of sugar from Cuba New York and Cuba to New Or- ans. James E. Ward & Co., the g New York freight brokerage m, posts the Exchange every day the prevailing freight rates. The eight differential for the 1959-60 icing period averaged 7.135 cents hundred pounds. This was not as gh as the 8.16 cents per hundred unds difference that existed dur- g the 1956-57 pricing period, but was the second largest freight dif- rential on record and, quite natur- y, a subject for heated discussion. The American Sugar Cane League at present making a study of the ight differential. Our Exchange co-operating in this study in any y that we can.

---

The price of blackstrap has been sappointing throughout the season eraging 9.3596 cents a gallon rough the week ending March th. The 1958-59 season's average ice of blackstrap was 12.5653 cents gallon.

The industry Grower - Processor mmittee voted last summer to rec- mend a 1959-60 Blackstrap Mo- sses Pricing Period of twenty-nine eks. The U.S.D.A. approved this commendation and the season's erage price of blackstrap will not known this year until the 28th April. Our Blackstrap Quotation mmittee is being forced to work ertime this year and I am sure at all of you join with me in ex- essing appreciation to our friends rbert Vaccaro, Chairman, Bascom Doyle, Tom Allen's alternate, Evans Farwell, Charles Gibbins, John Manard and Sidney Menard for their unselfish work. The troubles of these gentlemen have occasionally been confounded by the failure of buyers and sellers of blackstrap to promptly report their transactions to the Exchange.

---

Unless our Committees, both Raw Sugar and Blackstrap Molasses, receive the full co-operation of the industry it is impossible for the Exchange to function properly. Both the buyers and sellers of Louisiana raw sugar and blackstrap molasses should feel obligated to report transactions. I beg of you not to neglect this solemn duty to your industry.

---

The Raw Sugar Quotation Committee of the Exchange, under the able Chairmanship of Sedgwick Howard, functioned smoothly throughout the 16 week pricing period ending Janu-

(Continued on page 169)

**BOILER SHELLS**

7 - 72″ x 18′ Ideal for culverts or tanks. $350.00 each or $2100 entire lot loaded on your truck

•

**NEW CORRUGATED CULVERTS**

Large Stock, all sizes, galvanized
Can arrange delivery

•

**ELRAY KOCKE SERVICE INC.**
Phone GR 3-8278 P. O. Box 148
Donaldsonville, La.

## PRODUCTION OF SUGAR BY TYPES, LOUISIANA 1959 CROP

| | |
|---|---|
| Raw Sugar, 96° | 361,958 ton |
| Turbinados | 37,946 ton |
| Granulated (Ref.) | 22,994 ton |
| Granulated (Plt.) | 6,374 ton |
| Total | 429,272 ton |
| Total, Raw Value | 440,400 ton |
| Estimated in Magma | 204 ton |
| Total made and estimated (Raw Value) | 440,604 ton |
| Cane Ground for Sugar (Net Tons) | 5,072,611 ton |
| Sugar Produced per ton of cane | 174 lbs. |

Source: Processor reports to U.S.D.A.

## PRODUCTION OF MOLASSES AND SYRUP, LOUISIANA 1959 CROP

| | |
|---|---|
| Cane Cyrup | 1,217,822 gallon |
| 1st Molasses | 1,473,398 gallon |
| 2nd Molasses | 1,240,674 gallon |
| Blackstrap Molasses Produced | 28,258,331 gallon |
| Blackstrap Molasses, 80° Brix | *31,918,969 gallon |
| Hi-Test Molasses (Invert) | None |
| Cane ground for Syrup (Gross) | 52,426 tons |

Source: Processor reports to U.S.D.A.
* Includes 72,531 gallons in Magma.


*GET DEPENDABLE CONTROL WITH*

# CHIPMAN

## WEED & GRASS KILLERS

**2, 4-D AMINE:** For selective spraying of Johnson grass seedlings; also alligator weed and other susceptible broadleaved weeds in sugarcane. Applied spring and fall.

**ATLACIDE:** The safer chlorate . . . kills Johnson grass; other weeds and grasses along headlands, in ditches and other non-crop areas. Backed by years of outstanding results. Applied as a spray.

**SODIUM TCA:** For control of Johnson grass in sugarcane.

*Write for Information*

**CHIPMAN CHEMICAL CO.** Box 272 D Pasadena, Texas

# )FFICIAL RAW SUGAR PRICES, 1959-60 PRICING PERIOD

The Louisiana Sugar Exchange, ., New Orleans, Louisiana, quotes following as the official average ces of the following grades of ar ad molasses sold on this ex- nge during the weeks ended as icated:

Week ending October 15, 1959
Raws 6.515, Blackstrap 9.69
Week ending October 22, 1959
Raws 6.53, Blackstrap 9.625
Week ending October 29, 1959
Raws 6.52, Blackstrap 9.675
Week ending November 5, 1959
Raws 6.52, Blackstrap 9.69
Week ending November 12, 1959
Raws 6.50, Blackstrap 9.73
Week ending November 19, 1959
Raws 6.32, Blackstrap 9.75
Week ending November 26, 1959
Raws 6.22, Blackstrap 9.75
Week ending December 3, 1959
Raws 6.25, Blackstrap 9.75
Week ending December 10, 1959
Raws 6.14, Blackstrap 9.70
Week ending December 17, 1959
Raws 6.12, Blackstrap 9.50
Week ending December 24, 1959
Raws 6.04, Blackstrap 9.50
Week ending December 31, 1959
Raws 5.945, Blackstrap 9.50
Week ending January 7, 1960
Raws 5.87, Blackstrap 9.50
Week ending January 14, 1960
Raws 5.81, Blackstrap 9.50
Week ending January 21, 1960
Raws 5.83, Blackstrap 9.50
Week ending January 28, 1960
Raws 5.78, Blackstrap 9.40

The season's average price of raw sugar is 6.1819 cents per pound.

The prices of standard sugarcane for mills located in the three freight areas are as follows:

(a) 6.585 dollars per standard ton for mills except those located in the areas defined in (b) and (c) below.

(b) 6.553 dollars per standard ton for mills located north of Bayou Goula between the Atchafalaya and Mississippi Rivers.

(c) 6.521 dollars per standard ton for mills located north and west of New Iberia west of the Atchafalaya River.

The pricing period for blackstrap molasses will not end until April 28, 1960. At that time you will be advised of the season's average price.

---

## )DRESS

(Continued from page 166)

y 28th. Here again I know that the lustry joins with me in extending anks to Mr. Howard, and James augnard, R. M. Cockburn, Louis Bourgeois, John B. Levert, Chas. Levy and Earl B. Wilson for a ) well done.

We understand that Mr. Howard s been promoted to a higher eche- n in the management of the Nation- Sugar Refining Company and that will leave us shortly to assume his w duties. We are happy that he s been promoted but sorry that he nnot stay in Louisiana. Having dgwick Howard with us for the st three years has been a distinct easure.

---

During the year the Exchange and the Louisiana sugar industry lost two of its most respected citizens in the untimely deaths of Ernest A Burguieres and C. Steward Churchill. Both of these gentlemen were active in the affairs of the exchange and both were members of our Board of Directors. We are very sorry that they can no longer be with us.

---

In closing, allow me to say that it has been an honor and a privilege to serve as your President during the year ending today. The full co-operation of the members of the Exchange and our employees has made my term in office a pleasant one and I am grateful to all of you for it.

Again, thank you very much.

LIBRARY

## UP FRONT

(Continued from page 163)

retary. At present the Secretary can determine deficits and make reallocations but he cannot cut quotas for the countries having deficits.

The proposed amendment would make the Act safe to use when foreign countries develop shortages during our heavy consuming season. Without this amendment, a foreign country against whose quota a deficit has been declared, might be able to dump surpluses on our markets late in the year when our import needs are light. (Sec. 2(b)).

4. Section 3 would authorize the President, in the national interest or to secure adequate supplies, to reduce the quota *for a calendar year* for any foreign country other than the Republic of the Philippines and authorizes the Secretary of Agriculture to cause or permit the importation of a corresponding quantity of sugar.

This would give the President standby authority to deal with emergencies that might develop during the period for which the Act will be extended. This section and section 2(b) would become effective upon enactment, whereas the other provisions become effective January 1, 1961.

### Exchange Elects

The Annual Meeting of the Louisiana Sugar Exchange was held in New Orleans March 30th and F. A. Graugnard, Jr., head of the St. James Sugar Cooperative, Inc., St. James, La., was elected to serve a second term as President. Also re-elected were Louis P. Le Bourgeois, New Orleans, 1st Vice-President; Irving Legendre, Thibodaux, 2nd Vice-President; Sedgwick Howard, New Orleans, 3rd Vice-President; Samuel H. Livaudais, New Orleans, Secretary; Chas. A. Levy, New Orleans, Treasurer, and A. W. Dykers, New Orleans, Executive Secretary.

Thirteen of the twenty-six members of the Board of Directors of the Exchange are elected each year to two year terms. Those elected at Annual Meeting this year were:

T. M. Barker, Lockport; Horace Wilkinson III, Port Allen; F. Ev Farwell, New Orleans; Robert Fra New Orleans; Ed. J. Garland, N Orleans; Sedgwick Howard, New leans; Louis P. LeBourgeois, New leans; Samuel H. Livaudais, Jr., N Orleans; Edgar Murray, New leans; Harold F. Saufley, New Yo Chas. C. Savoie, Belle Rose; G. Talmage, Mobile, Ala., and Bro Thibaut, Napoleonville.

James H. Thibaut, President Evan Hall Sugar Cooperative, I Donaldsonville, was unanimou elected a member of the Board in place of the late C. S. Churchill was elected last year to a two y term. Other Board members wh terms will expire next year are T. Allen, Franklin; P. L. Billea Broussard; W. S. Chadwick, New leans; R. M. Cockburn, New Orlea E. D. Gelzer, New Orleans; Cha F. Gibbins, New Orleans; F. Graugnard, Jr., St. James; Irv Legendre, Thibodaux; John B. L ert, New Orleans; Chas. A. Le New Orleans; J. J. Munson, Hou and E. A. Rainold, Jr., New Orlea

—o—

***DID YOU KNOW . . . ?***

Clay Terry of Franklin sugges the "did you know" idea.

***DID YOU KNOW . . . ?***

Three states produce sugar c for sugar.

They are Louisiana, Florida, Hawaii.

***DID YOU KNOW . . . ?***

Twenty-two states produce su beets.

***DID YOU KNOW . . . ?***

The American Sugar Cane Lea was organized in 1922.

***DID YOU KNOW . . . ?***

Louisiana has 48 sugar cane tories, including the Audubon F tory at L. S. U. Florida has 3 su cane factories.

## N WASHINGTON

(Continued from page 165)

ent. His continued advocacy of a utious approach to any suggested anges in the Sugar Act, especially e proposal to grant discretionary owers to reduce foreign quotas, hich which President Eisenhower as requested, is fast winning con-erts. Many of Mr. Cooley's col-agues who formerly advocated dras-c revision of the Sugar Act, in order hit back at Cuba, have undergone change in attitude. A number of em now say that Mr. Cooley in pro-osing a short term extension with-t change may well have the best olution to the problem. They say is might be the most effective way show the Cuban people, and the oples of Latin-America, that our eling of resentment is directed only ward the few who are responsible r the economic catastrophe in Cuba. Whether Mr. Cooley is right or rong—there isn't much time left.

—o—

## N THE FIELD

(Continued from page 164)

### A New Sprayer

Of interest to growers considering sing ground equipment for apply-g endrin this year is the announce-ent of a new self-propelled high earance sprayer and duster de-gned to meet special requirements the cane field.

The machine is a product of the entury Corp., Cedar Rapids, Iowa, nd was designed in cooperation with ie Thomson Machinery Company of

*"Sugar Factory Insurance Specialists"*

**GILLIS, HULSE and COLCOCK, Inc.**

839 Union St. New Orleans, La.

Telephone JA 2-1225

Commercial Members
of the
AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC.

AMERICAN MOLASSES CO., OF LOUISIANA, INC.
400 N. Gayoso St.
New Orleans, La.

HARRY L. LAWS & CO., INC.
126 Carondelet Street
New Orleans 12, La.

THE HIBERNIA NATIONAL BANK
New Orleans, La.

LAMBORN & COMPANY, INC.
Whitney Building
New Orleans, La.

LEBOURGEOIS BROKERAGE CO.
823 Perdido Street
New Orleans, La.

THE NATIONAL BANK OF COMMERCE
New Orleans, La.

NATIONAL SUGAR REFINING CO.
Carondelet Bldg.
New Orleans, La.

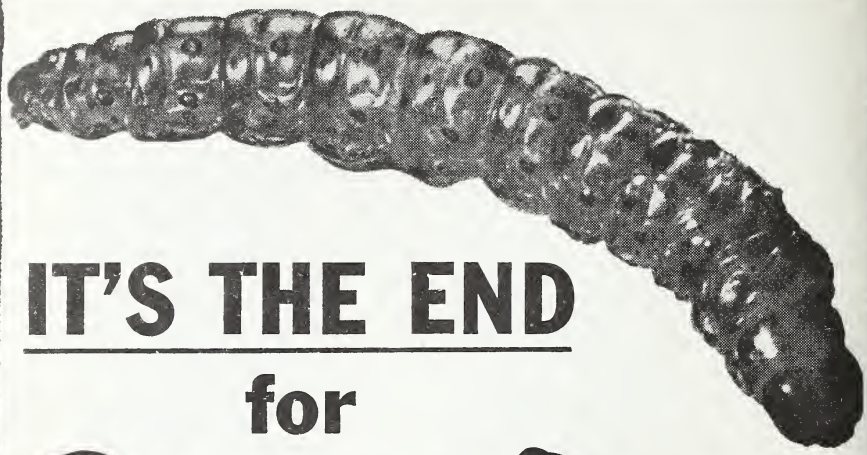
PENICK & FORD LTD., INC.
National Bank of Commerce Bldg.
New Orleans, La.

ESSO STANDARD OIL COMPANY
(Louisiana Division)
P. O. Box 1250 New Orleans 10, La.

STANDARD SUPPLY & HARDWARE CO., INC.
822 Tchoupitoulas St.
New Orleans, La.

STATE AGRICULTURAL CREDIT CORP., INC.
837 Whitney Building
New Orleans, La.

WHITNEY NATIONAL BANK
New Orleans, La.



# IT'S THE END for Sugar Cane Borer!

# endrin

The days when sugar cane borer strikes and steals a lion's share of your hard-earned profits are over. You can fight back with endrin insecticide . . . it's the end for sugar cane borer.

Endrin has been thoroughly tested and approved for control of sugar cane borer. For best results, apply endrin granules by air.

Put an end to sugar cane borer damage this season. Use endrin! It's available from your insecticide dealer. Don't delay—see him today!

**SHELL CHEMICAL CORPORATION**

AGRICULTURAL CHEMICALS DIVISION

119 South Claiborne Avenue, New Orleans 12, Louisiana

SHELL

3.61
Cham
Library, Experiment Station
University, Station
Baton Rouge, La.
LIBRARY
(3)
LOUISIANA STATE UNIVERSITY
LIBRARY

# THE SUGAR BULLETIN

38—No. 14 APRIL 15, 1960

*al Bulletin of the American Sugar Cane League of the U. S. A.*

## WHAT YOUR LEAGUE DUES DO FOR YOU

In this new feature of the Bulletin we will explain various activities of he League. All of our members know some of the things the League does, ut very few know everything that is done. We plan to discuss one phase of eague work on this cover page at least every other issue of the Bulletin.

Cane growers have a definite financial stake in freight rate matters. his was demonstrated last year when raw sugar freight rate reductions, btained by the League's Freight Rate Committee, were passed back to ane growers in the price processors paid for cane. Growers benefitted o the extent of 5.5 to 12.4 cents per ton of cane. Those growers farthest rom New Orleans profited most because they are in areas where freight ate reductions were the largest.

**Just this one accomplishment of one of the League's many committees, results in an increase in income to every grower much larger than he 1½ cents per ton of cane he pays as League dues.**

The League has a Freight Rate Committee composed of traffic experts. That Committee strives to obtain and maintain the lowest possible reight rates on cane, raw sugar, refined sugar, molasses, and bagasse. Members of this Committee serve without pay from the League; however hey have the assistance of some paid personnel, namely, the League's General Manager, the League's Attorney, and traffic specialists of the New Orleans Traffic and Transportation Bureau to which the League contributes financially.

The struggle for equitable freight rates is a never ending battle.

*Gilbert J. Durbin, General, Manager*

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry

THE
# SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Edit

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

**Issued on the 1st and 15th of each month.** **Subscription: Member 50 cents a year. Non-Members $3.00 a year.**

**Washington Office, 510 Union Trust Bldg., Washington, D. C.**
**Josiah Ferris, Manager**

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
W. F. Giles, Jeanerette, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

# UP FRONT WITH THE LEAGUE

*by A. W. Dykers*

## World Sugar Sales

The leased wires of the big news services have carried many stories of late about the millions of dollars that we are paying to Cuba under the Sugar Act. The cause of it all was a sale of Cuban raws to Russia. In a dramatic move calculated to raise our blood pressure, the Castro Government played up a sale of a million tons of sugar to the Communists at 3.98 a hundred pounds f. o. b. Cuba the same day that Cuban sugar was selling in our market at roughly 5.20 a hundred pounds f. o. b. Cuba. Enemies of our domestic sugar industry, and the Cuban dictator is definitely one of them, have seized upon this sale to condemn the whole Sugar Act.

Actually, sugar on the so called "World" market, except during times of world crisis, has always been priced far below the domestic price of sugar in any major country anywhere in the world. The so called "World" sugar market is a dumping ground for residual sugars—a sort of place of last resort to which, in normal times, sellers relegate that part of their sugar they have been unable to sell to their regular customers. Proof of this is clearly evidenced by the fact that out of a total world sugar production of about 55,000,000 tons, only about 6,000,000 tons are sold on the "World" market.

This dumping place for left-over sugar should be shorn of its high sounding "World" title and be called the "Residual Sugar Market," which it actually is. It belongs strictly to the buyers. Sellers vie with one another to see just how much cutting must be done to make a sale. *It is a well known fact that no major sugar industry anywhere in the world, including the Cuban sugar industry, could remain in business if it sold all of its sugar at "World" market prices.*

The fact that Cuba sold on the "World" market to the Russians for considerably less than the U. S. domestic price is nothing to become alarmed about. "World" sugar is excess sugar, and all left-overs are cheap. The alarming part of the

(Continued on page 182)

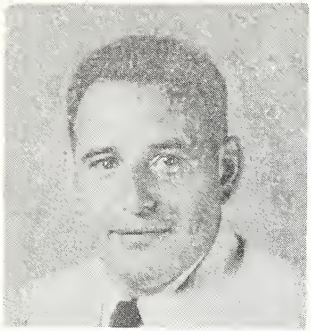
### In This Issue

Up Front With The League ..... 175
**World Sugar Sales—La Sucrerie de Cannes**

In The Field With Lloyd L. Lauden ..... 176
**Crop Conditions—Howard Thibodaux Honored**

In Washington With Joe Ferris ..... 177

Summary of U S D A Sugarcane Breeding Program For Louisiana At Houma, La. 1953-1959 ..... 178



# IN THE FIELD WITH LLOYD LAUDE

*by Lloyd L. Lauden*

## Crop Conditions

Some poor plant cane stands in some areas and the delayed growth generally throughout the sugar belt makes the outlook for the 1960 cane crop appear not too bright at this time. Added to this condition is a small amount of weak second year stubble in some areas as well as some weak first year stubble of cane which was either cut for seed or was harvested early for the mill last year.

It should be pointed out here that there are many good plant cane and stubble cane stands throughout the belt and this article is not meant to predict a bad 1960 cane crop, but merely to point out some conditions which exist now. It is very difficult to explain with one general statement the reasons for the weak plant cane stands in some areas. However, it can be said without doubt that the prolonged cool weather which was not conducive to germination and growth is primarily responsible. Seed pieces as well as newly sprouted eyes and shoots simply deteriorated and rotted during the cold spring. Eight months is a long period for seed pieces to remain in somewhat of a dormant state without deteriorating.

Examination of seed pieces of most varieties during early to middle March indicated that the prospect for excellent stands were good. All that was needed was warm weather. Warm weather was not forthcoming and a gradual deterioration of many seed pieces took place. Those who made seed piece examinations weekly actually w nessed this gradual deteriorati which took place. Should wa weather have occurred only thr weeks ago, plant cane stands wou have been materially better. Repo from growers indicate that C. P. 101 planted between the latter pa of August to middle September not good, particularly in the light soils. This cane probably made excellent stand last fall and w killed back at the wrong time by t November 7, 1959 freeze. In ge eral, stands of N. Co. 310, C. P. 68, and C. P. 48-103 appear good this time. A few reports of we plant cane stands in C. P. 36-1 have been recevied but in gene plant cane stands of C. P. 36-105 a good. With few exceptions, pla cane stands of C. P. 36-13 appe good.

The entire crop is badly in need warm weather. Suckering will late. Growers should be particula ly careful not to peak soil on the t of the row when cultivating th year. This should be watched clo ly in all varieties but especia when cultivating C. P. 44-101 a C. P. 52-68. Every care should given the crop to encourage go suckering.

Fortunately, most growers ke enough second year stubble in serve just in case some plant ca does not come up to a good sta This is always a good practice pa ticularly where good second ye stubble can be grown and whe Johnson grass is not too serio

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*

Now that income tax returns ve been filed and the final roll lled on the Civil Rights Bill, for is session, Congress may get ound to considering sugar legisla-n—after the Easter holidays.

Not many members of the House Senate feel that the "Adminis-ation's" Sugar Bill has even a ght chance to be enacted. Some n't like it because it does not cut eply enough into the Cuban quota; hers are violently opposed to giv-g the President authority to ad-st foreign quotas.

Senator Allen Ellender, who here-fore has always been a stalwart okesman for the domestic sugar dustry, announced that he was un-terably opposed to delegating con-essional authority to any Presi-nt, Republican or Democrat. De-ite the fatigue from long hours on e Senate floor during the Civil ghts debate, sometimes twenty-ur hours at a stretch, including seven-hour speech, Senator Ellen-r found time to draft a substitute r the Presidential authority sec-n of the Administration's Bill. ie Ellender proposal would give e President authority to adjust reign sugar quotas only when ngress is not in session. His pro-sal is as follows:

"(b) Notwithstanding the pro-visions of Title II of this Act, up-on a finding by the President that it is necessary, in the National interest, or to insure adequate supplies of sugar, that the quota for any calendar year, for any foreign country (other than the Republic of the Philippines) should be reduced, the President

"(1) if the Congress has not adjourned sine die, shall immediately notify the Congress of such findings (setting forth his reasons therefor), submit recommendations for implementing such findings, and request appropriate Congressional action thereon, or,

"(2) if the Congress has adjourned sine die, may decrease, upon such finding, any such quota in such amount as he shall determine to be necessary. Such reduction shall become effective immediately upon the publication in the Federal Register of the President's proclamation thereof."

Senator Wallace Bennett, Republican of Utah, who introduced the Administration's Sugar Bill in the Senate is reported to have accepted the Ellender amendment, and is trying to get White House approval for the change. If the Administration agrees to the change, the Sugar Act will have a much better chance of being extended for longer than one year.

---

owever, before destroying plant ne, growers should always spot ieck fields carefully by digging and xamining many seed pieces to be rtain that the field will not fi-nally make a stand. Some late planted fields have not come up to a good stand as yet but seed pieces in many of these are still fairly

(Continued on page 183)

# SUMMARY OF USDA SUGARCANE BREEDING PROGRAM FOR LOUISIANA AT HOUMA, LA., 1953-19

*Mr. Warren Harang, President*
*Mr. Gilbert J. Durbin, Vice-President and General Manager*
*Mr. Malcolm Duhe, Chairman Contact Committee*
*Amreican Sugar Cane League*
*414 Whitney Building*
*New Orleans, Louisiana*

Gentlemen:

While the League will have a detailed report of the research conducted on sugarcane at the Contact Committee meeting of the League at Houma in June, I would like to take this opportunity to acquaint you with some of the progress during the past year. We are ever mindful of the fact that the League and its members have been helpful by their support toward making this progress possible.. May I add that it was not only encouraging but a real morale booster to our staff to have 29 members of the League visit our Canal Point Station last January.

In order to simplify the report, it will be given under three main headings — namely, personnel, facilities, and the breeding program. Also to summarize the situation, we may cover more than just the past calendar year.

*Personnel:*

We are very proud of the personn who are engaged in sugarcane r search. We believe they are a high capable, dedicated group of indivic als who cooperate beautifully amo themselves and with others, inclu ing the staff at Louisiana State U versity, with the object of the bett ment of the sugarcane growers. T latter is, after all, our primary c jective. During the past two yea Messrs. Dunckelman, Breaux, a Fanguy have been added to the sta It is planned that a physiologist a pathologist will be added to the st at Houma. Contacts have alrea been made with promising indivic als. We have not lost Dr. R. E. Co man to the sugarcane program sir he is now settled in Hawaii and pursuing research involving the ph siology of the sugarcane plant whi should be helpful in all areas of su arcane growing. Dr. Stokes contin to provide excellent leadership in t over-all program.

*Facilities:*

As a result of the increased budg beginning in F.Y. 1959, we have be able to add a greenhouse at Hou and the crossing house at Car

**SUMMARY OF USDA SUGARCANE BREEDING PROGRAM FOR LOUISIANA 1953 - 1959**

**By Calendar Years, at Houma, La., only.**

| Year | No. of crosses at Canal Point | Approx. No. of viable seed | No. of seedlings planted | Selections from seedling nursery | No. of selections from first vegetative nursery | No. of C.P. assig |
|---|---|---|---|---|---|---|
| 1953 | 120 | 5,000 | 4,203 | 236 | 0 | 47 |
| 1954 | 221 | 97,864 | 70,820 | 22 | 67 | 6 |
| 1955 | 229 | 62,986 | 32,802 | 175 | 9 | 22 |
| 1956 | 298 | 61,921 | 40,867 | 609 | 0 | 53 |
| 1957 | 235 | 65,466 | 50,953 | 955 | 131 | 4 |
| 1958 | 177 | 200,000 | 173,170 | 1,394 | 191 | 52 |
| 1959 | 263 | 528,208 | 420,000 | 4,836 | 307 | 42 |

oint. Labor furnished by League nds also assisted in offsetting funds sed for the crossing house. Both of ese facilities are proving extremely seful in providing an assured exanded breeding program. With nds currently available, all facilies of the crossing house will be mpleted this spring, including a umber of labor-saving devices.

*reeding Program:*

For your information and as a asis of comparison in the future, r. Abbott has kindly prepared a ble showing the number of crosses, umber of seedlings, and selections calendar years since 1953. These ta are given in the accompanying ble:

It should be noted that the above ta applies to Houma only. Approxately the same amount of seed was nt to the Louisiana Agricultural xperiment Station at Baton Rouge. hus over a million viable seed was oduced for the breeding program 1959.

It can be observed that beginning 1958 there is a new plateau of seed oduced and seedlings planted which e confidently expect will result in a rger number of superior selections the years to come. We do not anticipate increasing the number of edlings over current levels, but we pe to be able to sustain a high level selections in the coming years. We el that studies by Dr. Hebert and hers point to the importance of a gh level of original selections from ie seedling nurseries and the sugestion made by Mr. Duhe in our nuary 1960 meeting in Florida that e utilize cooperating plantations for anting out the first line selections ill enable us to continue a high perntage of selections at this stage in ie breeding program without undue essure on our facilities at the Hoa Station. In the selection program eat stress will be given to selection r disease resistance, particularly ie mosaic disease, which is showing arming spread, as well as great emiasis on the need for high quality including high sucrose at an early date in the fall. There are several promising candidates for commercial canes in the selection program at the present time.

In connection with the breeding program it should be mentioned that we have been able to initiate an important addition to the regular crosses. This is in the form of creating basic material for the breeding program. Mr. Grassl, in charge of this phase, is making crosses between commercial canes and tremendously vigorous "noble" canes as well as wild canes such as S. spontaneum and even sorghum with the objective of getting new "blood" into the regular canes for crossing. Some of these "wild" types have disease or cold resistance or quality factors not now obtainable in the commercial canes. This is a longtime program, but should in time yield valuable results.

In addition to the points mentioned above, the staff has carried on research in physiology, including assistance on the trash committee, fertility relations, and in pathology. Moreover, with the cooperation of the Weed Section, an expanded program is underway on studies of chemical weed control. The League has shown a great deal of interest in this area of research. Since the Weed Section had no one place in charge of the work at Houma, we considered it sufficiently important to detail personnel, who already had a full schedule of work, to carry out a thorough screening of nine new chemicals for weed control in sugarcane in cooperation with general supervision and suggestions from personnel of the Weed Section. If any of these show promise, they will be given further study in detailed sugarcane plots.

As can be readily seen, the entire research program is expanding and in order to reap the benefits of the increased crossing and seedling program, the selection and disease phases must also be expanded. We are hopeful that all of these phases can

(Continued on page 182)

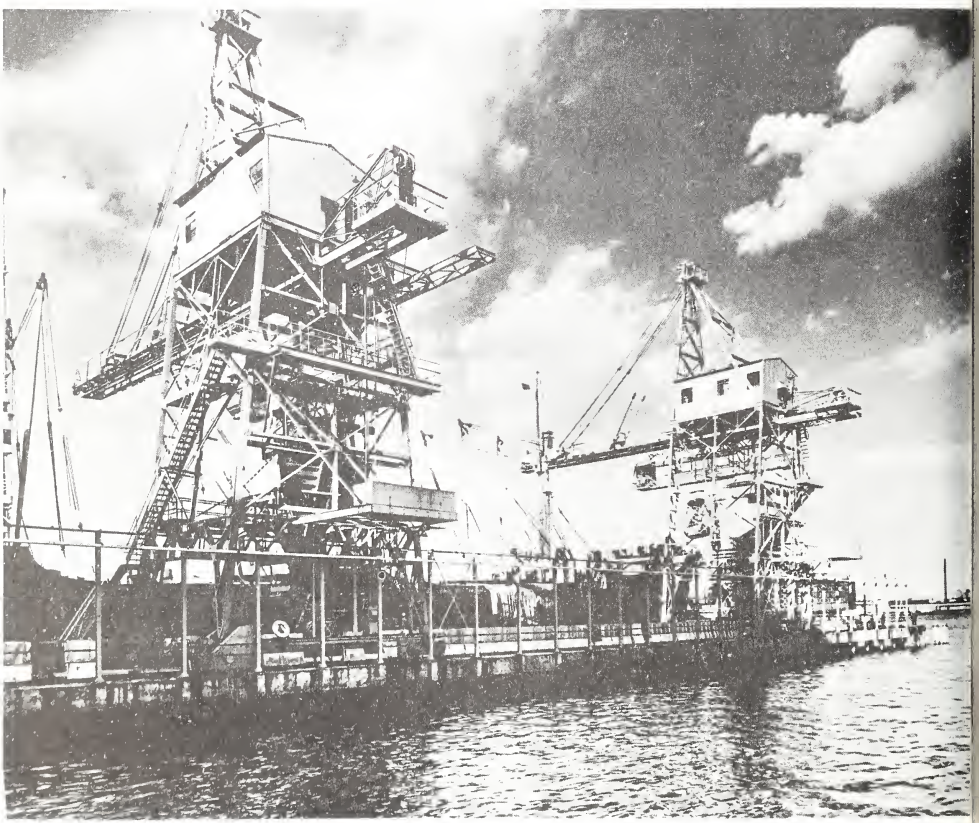
# BULK RAW SUGAR

In recognition of a growing trend toward the shipment of raw sugar in bulk—rather than in the traditional bags—the New York Coffee and Sugar Exchange, Inc., recently instituted trading in a new contract for bulk delivery.

Trading in the new No. 7 Contract is expected to start slowly and build up gradually over a period of months. Veteran market observers note that this is the pattern generally followed by any new contract.

"This new contract," says Exchange President Arthur L. Ransohoff, "reflects the trend toward modernization and streamlining of oper tions that exists in the sugar busine as well as in many others. Our E change always strives to keep abrea of the trends."

Mr. Ransohoff points out that 1( per cent of Puerto Rico's sugar shi ments—some 960,000 tons last ye —was in bulk. So were all of H waii's shipments, estimated at son 977,000 tons last year, and abo 10% of the Philippine quota of 98( 000 tons. (In 1960, it is estimat that over half the Philippine shi ment will be bulk.) In addition, bu shipment is growing in favor wi



**BULK UNLOADING facilities at the American Sugar Refining Company's Balti more refinery use modern machinery and the latest in materials-handling equipmen to streamline the process of transferring raw sugar from ship to processing plant.**

oducers in the Dominican Republic d other producing areas.

He also pointed out that a rapidly creasing proportion of Cuban sugar, hich accounts for one-third of nited States consumption under the gar Act, is being shipped in bulk.

"As of the end of 1959," Mr. Ranhoff notes, "bulk shipments of Cun sugar registered some 26 per nt of the total, in contrast to only per cent some two years earlier. nd, the beginning weeks of this ar have shown additional gains in lk shipment."

He points out that the latest availe figures, covering the period January 1 to February 20 of this year, show that 64 per cent of the Cuban sugar shipped to the United States was in bulk. This compared with 24 per cent for the corresponding period of 1959.

The new No. 7 Contract calls for delivery of 50 long tons of sugar in bulk, deliverable at the ports of New York or Baltimore, and duty free or duty paid. In most respects, the terms are similar to those of the No. 6 Contract (covering shipment in bags and priced on an in-bond basis), with additional specifications as to conditions to be maintained in ships' holds and storage compartments.

**FLOOR TRADERS crowding the sugar ring at the New York Coffee and Sugar Exchange, Inc., can now trade in sugar futures contracts for bulk delivery, as well as the traditional bag delivery, under the new No. 7 Contract.**

### *DID YOU KNOW . . . ?*

Nineteen Louisiana parishes produce sugar cane for sugar, and that the top five sugar cane producing parishes are Terrebonne, Iberia, St. Mary, Assumption, and Lafourche.

### *DID YOU KNOW . . . ?*

The annual value of the Louisiana sugar cane crop at the first processing level is usually about 75 million dollars.

### *DID YOU KNOW . . . ?*

The U. S. Department of Agriculture estimates that Louisiana has 30,000 sugar cane field workers.

### *DID YOU KNOW . . . ?*

In 1958 there were 5936 sugar cane growers on 2908 Louisiana cane farms.

### *DID YOU KNOW . . . ?*

Some soils in the Louisiana cane area need phosphate and potash fertilizer. Others soils need only nitrogen.

### *DID YOU KNOW . . . ?*

Since the mid-1930's, most cane varieties grown by Louisiana farms have been tailor-made for Louisiana conditions.

### *DID YOU KNOW . . . ?*

Louisiana cane bagasse is being used to produce paper, plastics, insulation and building boards, horticultural mulch, and poultry litter.


*"Sugar Factory Insurance Specialists"*

**GILLIS, HULSE and COLCOCK, Inc.**

839 Union St. New Orleans, La.

Telephone JA 2-1225


## SUMMARY

(Continued from page 179)

be carried forward successfully wi the present staff, including the ne additions previously mentioned. Ho ever, the ability of professional sta members to carry forward the wo is dependent upon the assistance th have available to do much of the ro tine, detailed, semi-technical work i volved. The support of the Leag has been very helpful in providi such assistance, including necessa labor, and we trust that such suppo will continue.

Sincerely yours,

*H. M. Tysdal, Chief*
*Tobacco and Sugar Cro Research Branch*

———o———

## UP FRONT

(Continued from page 175)

Cuban situation is not that Cuba so sugar to the Russians but that t Castro Government is antagnostic t ward the United States.

### "La Sucrerie de Cannes"

E. Hugot's book "La Sucrerie Cannes" has been translated in English by G. H. Jenkins and pu lished under the title "Handbook Cane Sugar Engineering". Sale Di tributor of the book in the U. S. is Van Nostrand Company, Inc. 1 Alexander St., Princeton, New Jerse The price is $35 per copy.

### Congratulations

For one reason or another we ha not been able to extend our congrat lations to Dr. Leo Hebert, Sr., sin he was chosen "Personality of t Week" back in February and was t subject, along with his two sons, of very fine article in the February 9 issue of "The Terrebonne Press".

We take this belated opportuni to congratulate Dr. Hebert, not on for his outstanding achievements the field of sugar cane technology, b for his outstanding accomplishment along with Mrs. Hebert, in the fie of family relations. Leo Jr., a John, who were featured in t

'ress" article with their father, are credit to the youth of America.

—o—

## THE FIELD

(Continued from page 177)

od. These fields can be kept for a ile longer without additional cost.

The industry will be happy to ar that Mr. Howard Thibodeaux, ssistant Manager of Oakland Di- sion of South Coast Corporation, s been honored by having been lected as distinguished alumnus om Southwestern Louisiana In- itute. He and Miss Margaret Jol- y, who was also selected as a dis- nguished alumna, will be honored Aggie Day at S. L. I. on April 27. ngratulations to Mr. Thibodeaux d Miss Jolley.


### BOILER SHELLS

' - 72" x 18' Ideal for culverts r tanks. $350.00 each or $2100 ntire lot loaded on your truck

•

### NEW CORRUGATED CULVERTS

Large Stock, all sizes, galvanized
Can arrange delivery

•

**LRAY KOCKE SERVICE INC.**
Phone GR 3-8275 P. O. Box 148
Donaldsonville, La.



### Commercial Members of the AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC.

**AMERICAN MOLASSES CO., OF LOUISIANA, INC.**
400 N. Gayoso St.
New Orleans, La.

**HARRY L. LAWS & CO., INC.**
126 Carondelet Street
New Orleans 12, La.

**THE HIBERNIA NATIONAL BANK**
New Orleans, La.

**LAMBORN & COMPANY, INC.**
Whitney Building
New Orleans, La.

**LEBOURGEOIS BROKERAGE CO.**
823 Perdido Street
New Orleans, La.

**THE NATIONAL BANK OF COMMERCE**
New Orleans, La.

**NATIONAL SUGAR REFINING CO.**
Carondelet Bldg.
New Orleans, La.

**PENICK & FORD LTD., INC.**
National Bank of Commerce Bldg.
New Orleans, La.

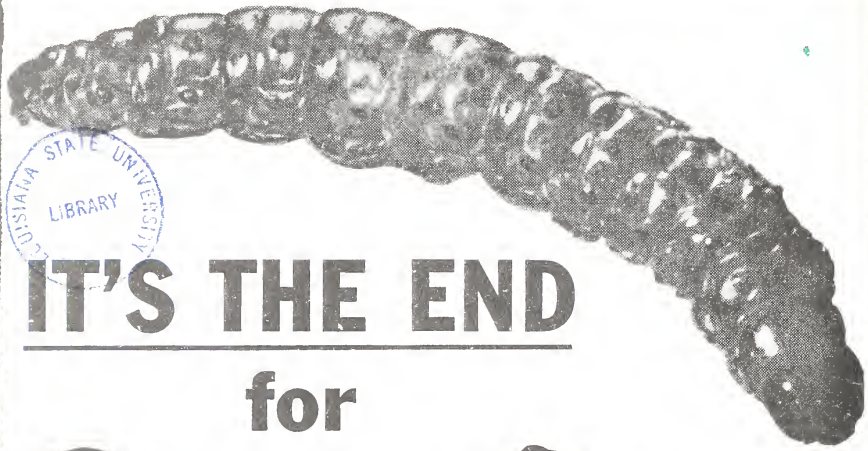
**ESSO STANDARD OIL COMPANY**
(Louisiana Division)
P. O. Box 1250 New Orleans 10, La.

**STANDARD SUPPLY & HARDWARE CO., INC.**
822 Tchoupitoulas St.
New Orleans, La.

**STATE AGRICULTURAL CREDIT CORP., INC.**
837 Whitney Building
New Orleans, La.

**WHITNEY NATIONAL BANK**
New Orleans, La.

LOUISIANA STATE UNIVERSITY LIBRARY



# IT'S THE END for Sugar Cane Borer!

# endrin

The days when sugar cane borer strikes and steals a lion's share of your hard-earned profits are over. You can fight back with endrin insecticide . . . it's the end for sugar cane borer.

Endrin has been thoroughly tested and approved for control of sugar cane borer. For best results, apply endrin granules by air.

Put an end to sugar cane borer damage this season. Use endrin! It's available from your insecticide dealer. Don't delay—see him today!

**SHELL CHEMICAL CORPORATION**

AGRICULTURAL CHEMICALS DIVISION

119 South Claiborne Avenue, New Orleans 12, Louisiana

SHELL

3 3.61
Su 35
c. 1

La. State University Library
Acquisitions Dept.
Baton Rouge 3, La.

LOUISIANA STATE UNIVERSITY
CHEMISTRY
LIBRARY

Chemistry

# THE SUGAR BULLETIN

38—No. 15 MAY 1, 1960

*ial Bulletin of the American Sugar Cane League of the U. S. A.*

LOUISIANA STATE UNIVERSITY
LIBRARY

PRINTED ON PAPER MADE FROM
LOUISIANA SUGAR CANE BAGASSE

## *In This Issue*

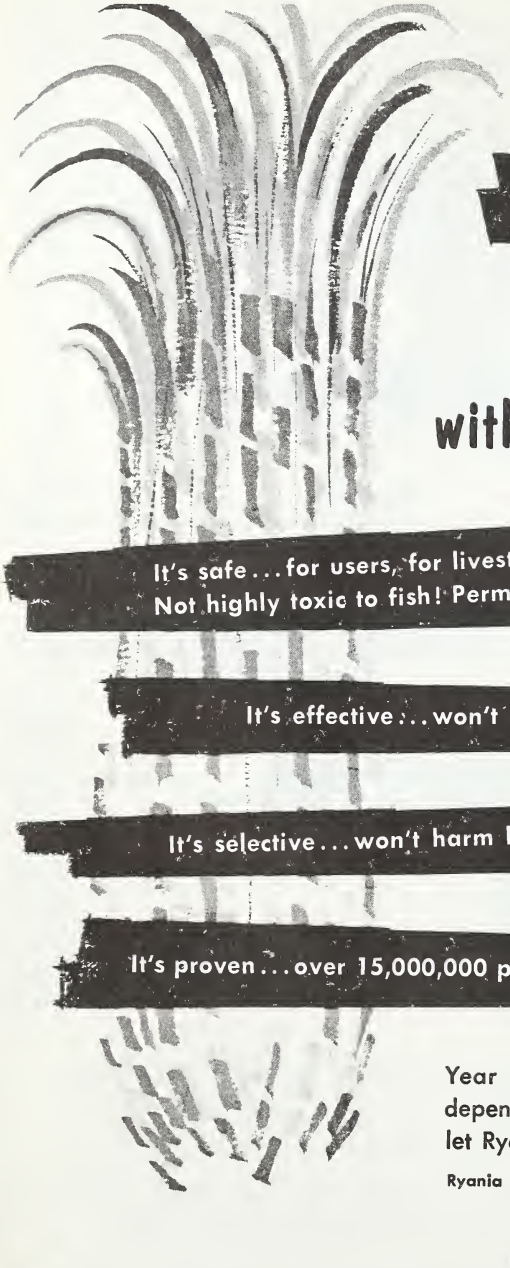
Up Front With The League ..... 188
**No Acreage Restrictions—Mill Marketing Allotments—Blackstrap Pricing Period Ends**

In The Field With Lloyd L. Lauden ..... 189
**Sweet Clover—Unreleased Varieties**

In Washington With Joe Ferris ..... 190
**Sugar Legislation Confused**

The Production Of True Seed Of Sugarcane In Louisiana ..... 191

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry



you can control

Sugar Cane Borer

right up to harvest

with Ryania!

It's safe... for users, for livestock, for wildlife!
Not highly toxic to fish! Permits use of bagasse for feed!

It's effective... won't develop resistant strains!

It's selective... won't harm beneficial insects!

It's proven... over 15,000,000 pounds used in the past 12 years!

Year after year more and more growers depend on Ryania. This year, as in the past, let Ryania protect *your* crops.

Ryania is covered by Patent Nos. 2,400,295 and 2,590,536.

Distributed by
BARTLETT CHEMICALS, INCORPORATED
New Orleans, Louisiana
THOMPSON-HAYWARD CHEMICAL CO.
New Orleans, Louisiana

PENICK

*Farm Chemical and Insecticide Division*

S. B. PENICK & COMPANY • 100 CHURCH ST., NEW YORK 8 • 735 W. DIVISION ST., CHICAGO

THE
# SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Editor

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

**Issued on the 1st and 15th of each month.** **Subscription: Member 50 cents a year. Non-Members $3.00 a year.**

**Washington Office, 510 Union Trust Bldg., Washington, D. C.**
**Josiah Ferris, Manager**

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
W. F. Giles, Jeanerette, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

# UP FRONT WITH THE LEAGUE

*by A. W. Dykers*

### No Acreage Restrictions

Word has been received from Washington that there will be no limit to the amount of cane that a farmer may grow and harvest in 1961. This, coupled with the unrestricted crop this year, will give cane farmers at least two years to catch back the acreage lost during the 1954-1959 period of Government restrictions.

The U. S. D. A. decided to lift acreage restrictions in 1961 after considering facts and figures presented to the Sugar Division by the American Sugar Cane League. In the official news release covering the unlimited acreage decision, the Government indicated that the following facts were instrumental in bringing about the ruling.

1. The effective inventory on Jan. 1, 1960 (sugar on hand, plus sugar to be processed after Jan. 1 from 1959-crop sugarcane), was less than desirable. This situation resulted from increases in the 1959 marketing quota for the Mainland Cane Sugar Area due to large deficits in offshore domestic area and a smaller-than-anticipated 1959-crop sugar production in the area due to freeze damage during harvest.

2. Despite the lack of restrictions on marketings of 1960-crop sugarcane, the effective inventory on Jan. 1, 1961, probably will also be less than desirable.

3. Marketings from unrestricted acreage for the 1961 crop should enable the area to meet its quota under the Sugar Act and build sugar stocks up to a more normal level.

4. Although general readjustment problems could result if and when re strictions are reimposed, unrestricte acreage for the 1961 crop will tend t promote desirable adjustments i acreages within certain mill areas.

Unrestricted farm marketing fro the 1961 crop were recommende unanimously by industry spokesme

### Mill Marketing Allotments

The fact that there will be no acre age restrictions on the 1960 and 196 Louisiana and Florida cane crop does not necessarily mean there wi be no mill marketing allotments The League presented testimony at hearing held in New Orleans on Apr 13th which it hopes will result in th lifting of mill marketing quotas bu as of this date no ruling on this sub ject has been received.

It is thought, of course, that th unrestricted marketing allowed las season will be continued through th present crop.

### Blackstrap Pricing Period Ends

After 29 weeks of very rough go ing, the 1959-60 Louisiana Pricin Period for Blackstrap Molasses f nally came to an end at the close o the market on Thursday, April 28th 1960. The average price for the Sea son was announced by the Louisian Sugar Exchange to be 9.1907 cents gallon, f.o.b. bulk plantation. Th 1958-59 season's average price wa 12.5653.

According to our rather rapid ca culation, which is now official, th molasses bonus this year will b 10.689 cents per ton of cane. Th 1958-59 molasses bonus was 22.6 cents per actual ton of cane.

The blackstrap market was a wea

(Continued on page 194)

# IN THE FIELD WITH LLOYD LAUDEN

*by Lloyd L. Lauden*

### Sweet Clover

Mr. F. Evans Farwell of Milliken nd Farwell, Inc. has been for some me a strong advocate of the use of weet Clover in the sugar cane belt. Iilliken and Farwell first planted oth the Floranna and the Hubam weet Clover in fields not in cane in ne fall of 1956. The first cane was lanted in these fields in 1957. Sweet lover has been planted on plantation cale on Milliken and Farwell proprties each year since 1956.

According to Mr. Farwell the Huam Sweet Clover is equally as good s the Floranna Sweet Clover. Both re usually planted during October r November for best stands. Later lanting has been fairly successful ut this should be done only when ecessary or as an emergency measre. In general, good stands can be xpected if the clover is planted early n fields with good drainage. In a ew cases, fairly satisfactory stands esulted with February planting.

Unlike other clovers, Sweet Clover oes not die down during the hot veather of April and May. Usually he clover is plowed down about June st when approximately 5 feet tall. n areas where weak stands have occurred and where Johnson grass is eavy, earlier plowing down has been racticed.

Mr. Farwell states that this clover ot only adds green manure to the oil which betters the physical condiion as well as adds nitrogen, but the eavy growth prevents or suppresses he growth of Johnson grass. Growrs are invited to visit any of the Milliken and Farwell properties to observe this clover in the field.

Mr. Irving Arceneaux, Manager, Little Texas Plantation and mill, reports that Mr. C. J. Arcement, Mr. Dennis Thibodeaux, and Mabile Bros. are also planting Sweet Clover.

### Unreleased Varieties

Growers should be interested to hear that the three new unreleased varieties, C. P. 53-1, C. P. 55-14, and C. P. 55-30 are up to a very good stand in plant cane on the Secondary Stations inspected thus far. These three new varieties are now on 47 Increase Stations located throughout the sugar belt. County Agents will be happy to make available to growers the name and the location of the Secondary Stations in the Parish.

All unreleased varieties plots will be marked with white stakes and the variety number will be stamped on the stake by the end of May. Growers are always welcome to visit and observe these plots.

Stubble cane of C. P. 53-1, where seed was taken last year, appears poor at this time. Stubble cane not taken for seed is up to a good stand. This variety has shown promise but unfortunately C. P. 53-1 is very susceptible to Stunting Disease and some mosaic was rogued from a number of Increase Stations last year. In addition two seed plots of C. P. 53-1 were discarded last year because of the rapid spread of mosaic in the variety. These plots were near N. Co. 310 which was very heavily infected with mosaic disease. Insects spread

(Continued on page 194)

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*

Allen J. Ellender, Louisiana's senior Senator, who for more than a quarter of a century has successfully championed legislation sponsored by the sugar industry of his state, has introduced a bill, S. 3361. This bill bears the unqualified endorsement of Louisiana producers. Also it is endorsed by both producing and refining interests in the United States.

S. 3361, which has been explained in detail in previous issues of the Bulletin does not make any mandatory cuts in Cuba's sugar quota. When he introduced his bill, Senator Ellender stated—

> "Senators will look in vain in this bill for any language designed to penalize the people of Cuba. This is not punitive legislation. Authority is given, as I have indicated, initially to the Congress or, should the Congress not be in session, to the President, to deal with any arbitrary or high-handed actions on the part of foreign governments whose sugar producers are accorded a quota under the act.
>
> "I do not believe that I need to dwell any further on this particular point, except to say that the Sugar Act was not designed as, or must be permitted to become a punitive economic weapon, designed to wreak hardship upon peoples with whom we have enjoyed friendly relations in the past. By the same token, I do believe it is reasonable to include in any extension of the act realistic emergency power, designed to protect American interests and American citizens from the wanton rava[s] of foreign dictators.
>
> "In this connection, Mr. Pre[si]dent, the Sugar Act, prior to 19[56], contained similar emergency [au]thority designed to deal with [es]sentially the same kind of contin[gen]cies with which our measure [is] concerned. The amendments [we] propose today involve a refinement of this prior authority."

Louisiana's junior Senator, Russ[ell] B. Long takes the opposite view. [In] a statement to the press Senat[or] Long has called for an immedia[te] cut in the Cuban quota "to help p[ro]tect U. S. investments from the C[as]tro regime." Senator Long has s[aid] that drastic cuts in the Cuban quo[ta] would give the United States b[ar]gaining power in dealing with Cast[ro] in an effort to protect U. S. inve[st]ments in Cuba which have been e[x]propriated by the Castro regim[e]. The question of paramount impo[r]tance is,—"What does Senator Lo[ng] propose to do with the quota that [he] would take from Cuba?"

An almost identical situation exis[ts] in the State of Florida, the oth[er] partner in the mainland cane are[a]. Florida's senior Senator, Spessard Holland is a co-sponsor with Senat[or] Ellender of S. 3361. His colleagu[e] the junior Senator from Florid[a], George A. Smathers, according [to] press releases from his office, [is] about to become the father of a sug[ar] bill which, among other thing[s] would "help protect U. S. investmen[ts] in Cuba". The Smathers bill repute[d]

(Continued on page 194)

# IE PRODUCTION OF TRUE SEED OF SUGARCANE IN LOUISIANA

*S. J. P. Chilton, E. D. Paliatseas, L. Anzalone and W. Falgout* [1]

In 1950 it was reported that viable ed from crosses between different rieties of sugarcane could be pro- ced in Louisiana. This was done marcotting sugarcane stalks and inging them into a greenhouse here temperatures were high ough for pollen production and e maturation of seed. With this hnique an estimated 167,372 seed- gs from crosses were produced in e years 1950 through 1953 (1950—1951—29, 512, 1952—57, 345, 1953 80, 508) at Grand Isle, La. Such rieties as L. 55-61, L. 56-25 and 57-2 now in the outfield test plots d primary stations were selected m the seedlings produced by this ed.

In 1953, it was discovered by Chil- n and Moreland that sugarcane uld be induced to flower at Baton uge, La., by gradually shortening e day length. As a result of this rk, a program was initiated in 54 to produce sugarcane seed at ton Rouge, La., and in 1958 the ogram was broadened to include the use of marcotted stalks from Grand Isle, La.

In 1958 and 1959 more seed were produced than could be used in the Baton Rouge breeding program.

Table 1 gives the number of seed produced at Baton Rouge, La. in the years 1954 through 1959. It may be seen that beginning with only 2,030 seedlings produced in 1954, the totals increased each year until an estimated 196,000 were produced in 1958 and 563,000 in 1959. These last two years, much more seed were produced than could be planted in the field.

This table also includes the number of L. seedlings planted in the field for selection from 1954 through 1958 and the estimated number to be planted in the field in 1959. There have been 175,530 planted in the field with an estimated 95,000 to be put in the field in 1960 or a total of 270,530.

Table 2 gives information on certain crosses in storage and growing in greenhouse with the selection rates

**able 1. Production of true seed of sugarcane from crosses made at Baton Rouge, La. from 1954 through 1959 crossing seasons.**

| ar | Estimated No. seedlings | Totals | Estimated No. put in field each year | Totals |
|---|---|---|---|---|
| 54 | 2,030 | 2,030 | 2,417[1] | 2,417 |
| 55 | 29,253 | 31,283 | 27,213 | 29,630 |
| 56 | 46,213 | 77,496 | 25,362 | 54,992 |
| 57 | 60,840 | 138,336 | 33,104 | 88,096 |
| 58 | 196,158 | 334,494 | 87,434 | 175,530 |
| 59 | 563,417[2] | 897,911 | 95,000 | 270,530 |

[1] Includes some selfs
[2] Estimated as of Feb. 18, 1960

Table 2. Estimated "L" seedlings available in greenhouse and storage from 1958-1959 crosses with selection percentages of 10 per cent or more, and estimated selections available.

| Parentage | Estimated No. in storage | Estimated No. in greenhouse | Total | % selection in past | Estimated No. for Selection in storage | Estimated No. for Selection in greenhouse | Total |
|---|---|---|---|---|---|---|---|
| C.P.34-120 x C.P.52-15 | - | 1,030 | 1,030 | 17.30 | - | 178 | 178 |
| C.P.48-103 x C.P.36-105 | 15,030 | 5,594 | 20,624 | 10.24 | 1,539 | 573 | 2,112 |
| " x C.P.44-101 | - | 7,171 | 7,171 | 21,85 | - | 1,567 | 1,567 |
| " x C.P.44-155 | 4,406 | 2,352 | 6,758 | 17,17 | 757 | 404 | 1,161 |
| " x C.P.53-16 | 3,510 | 5,208 | 8,718 | 13.64 | 479 | 710 | 1,189 |
| " x C.P.52-15 | 13,000 | 4,728 | 17,728 | 9.88 | 1,284 | 467 | 1,751 |
| C.P.52-1 x C.P.52-15 | - | 761 | 761 | 12.50 | - | 95 | 95 |
| C.P.52-68 x C.P.48-103 | - | 16,952 | 16,952 | 34.43 | - | 5,837 | 5,837 |
| C.P.53-18 x C.P.36-105 | 40,731 | 7,688 | 48,419 | 20.65 | 8,411 | 1,588 | 9,999 |
| " x C.P.44-101 | - | 576 | 576 | 14.40[1] | - | 83 | 83 |
| " x C.P.44-155 | 18,723 | 1,728 | 20,451 | 17.78 | 3,329 | 307 | 3,636 |
| " x C.P.52-15 | - | 2,882 | 2,882 | 14.60[1] | - | 421 | 421 |
| | 95,400 | 56,670[2] | 152,070 | | 15,799 | 12,230 | 28,029 |
| Est. 40% discards (mosaic and death) | | | | | 6,320 | 4,892 | 11,212 |
| Balance (available for 6' plots) | | | | | 9,479 | 7,338[3] | 16,817[3] |

[1] selection rate at Houma, La.

[2] 11,305 from 1958 crosses

Table 3. List of varieties which have flowered at Baton Rouge and used in crosses from 1953 through 1959. (82 varieties).

| iety | Variety | Variety |
|---|---|---|
| 41-142 | C.P. 48-96 | C.P. 59-22* |
| | C.P. 48-103* | |
| 281 | C.P. 48-117* | Eros |
| 290* | C.P. 48-126* | |
| 356 | | F. 36-273 |
| | C.P. 49-49 | F. 36-819* |
| . 1161 | | |
| . 1165 | C.P. 50-23* | L. 54-3 |
| | C.P. 50-37* | L. 54-17* |
| . 27-108 | C.P. 50-41* | L. 54-22 |
| | C.P. 50-52* | |
| . 29-103 | | L. 55-2 |
| . 29-116 | C.P. 51-24* | L. 55-3 |
| . 29-320* | | L. 55-10 |
| | C.P. 52-1* | L. 55-15 |
| . 30-24 | C.P. 52-15* | |
| | C.P. 52-18* | L. 56-25 |
| . 33-224* | C.P. 52-57* | L. 56-33* |
| | C.P. 52-68* | L. 56-42* |
| . 34-79 | C.P. 52-98 | |
| . 34-120* | | L. 58-10* |
| | C.P. 53-1* | |
| . 36-13 | C.P. 53-16* | N.Co. 310* |
| . 36-105* | C.P. 53-18* | |
| . 36-183 | C.P. 53-23* | P. 33-29 |
| . 36-187 | C.P. 53-59 | |
| . 36-211 | C.P. 53-97 | P.O.J. 2725 |
| | C.P. 53-98 | |
| . 38-34* | C.P. 53-99 | Q. 28 |
| | C.P. 53-255 | |
| . 43-33 | | 28-NG 72-514 |
| . 43-64* | C.P. 55-38 | |
| . 43-74 | C.P. 55-40 | |
| . 44-101* | C.P. 56-23* | |
| . 44-126 | | |
| . 44-154* | C.P. 57-32* | |
| . 44-155 | | |
| . 44-156 | C.P. 58-57* | |
| | C.P. 58-64* | |
| . 47-49 | C.P. 58-67* | |
| | C.P. 58-68* | |

* Used in 1958 and 1959 crossing seasons

previously made from these crosses at Baton Rouge or Houma, La. It may be seen in Table 2 that there is seed for over 95,000 seedlings in storage and 56,670 in the greenhouse from 12 crosses giving 9.88 per cent selection or better in the past. These seed include an estimated 28,000 which would be selected for 6′ plots. With a 40% discard for mosaic, etc. there should be over 7,000 selections available from the 56,670 seedlings in the greenhouse. This of course does not include the selections which will be made from the other 60,000 seedlings also in the greenhouse.

Table 3 gives the varieties which flowered and were used in crosses made at Baton Rouge, La., since 1954. There are 82 varieties in all. These include nearly all the parents which have been found to give good selection rates.

---

[1] Professor, Assistant Professor, Assistant Professor and graduate research assistant, Louisiana Agricultural Experiment Station, Baton Rouge, La. A cooperative project with the U. S. Dept. of Agriculture.


**FOR SALE**

Thomson Cane Harvester with pickup attachment. The machine is in tip-top shape and reasonably priced. For particulars contact

**Guy Zeringue**

P. O. Box 410 Phone 7-5378

Raceland, La.



***"Sugar Factory Insurance Specialists"***

**GILLIS, HULSE and COLCOCK, Inc.**

**839 Union St.** **New Orleans, La.**

**Telephone JA 2-1225**


## IN THE FIELD

(Continued from page 189)

the disease to the nearby C. P. 5[illegible].

If C. P. 55-14 and C. P. 55-30 c[illegible] tinue to show promise the Lea[illegible] will increase these to the maxim[illegible] of the seed supply this year. The [illegible] dustry is always in need of new [illegible] rieties. These varieties will be ca[illegible] fully inspected for mosaic and rogu[illegible] if necessary.

Mosaic disease is now showing [illegible] in many varieties. Inspection a[illegible] roguing can now begin. Growers [illegible] again urged to check cane intend[illegible] to be used for seed next year. Ca[illegible] free of mosaic disease will out-yi[illegible] cane infected with mosaic disease.

—o—

## UP FRONT

(Continued from page 188)

affair throughout most of the pr[illegible] ing period. The first sale of the s[illegible] son was recorded on the 28th of [illegible] tober at 9-3/4 cents a gallon and t[illegible] last sale was on April 28th at 8 ce[illegible] a gallon. The 9-3/4 cent price w[illegible] the high for the season and the[illegible] cents price on the last day of t[illegible] pricing period was the low for t[illegible] season.

Quotations held fairly s t e a[illegible] through January, when the avera[illegible] was 9.61 cents a gallon, but declin[illegible] steadily thereafter finishing with t[illegible] 9.1907 average for the season.

—o—

## IN WASHINGTON

(Continued from page 190)

ly will call for a drastic cut in t[illegible] Cuban quota. Advance press notic[illegible] on the Smathers bill indicate that t[illegible] major portion of the Cuban quo[illegible] cut would go to Mexico and oth[illegible] full-duty countries but a certain po[illegible] tion of the cut would be made ava[illegible] able to "new" producers in "ne[illegible] producing areas in the mainla[illegible] United States.

In spite of these differences e[illegible] pressed by the four Senators fr[illegible] Louisiana and Florida, we hope th[illegible] they will work for the passage [illegible] S. 3361 at the appropriate time.

***D YOU KNOW . . . ?***
A chemical method for roguing for saic has been developed.

***D YOU KNOW . . . ?***
Daily growth rates of sugar cane higher in Louisiana and Florida in in other parts of the world.

***D YOU KNOW . . . ?***
One half of Louisiana's cane acre- is in C. P. 44-101. It all came m one tiny seed, the size of an ant.

***D YOU KNOW . . . ?***
The average person in the United tes consumes about 100 pounds of gar each year.

***D YOU KNOW . . . ?***
t would cost between 3 and 4 lion dollars to build a new average e Louisiana sugar cane mill.

***D YOU KNOW . . . ?***
The government makes a profit of ut 20 million dollars a year from sugar program.


## BOILER SHELLS

- 72″ x 18′ Ideal for culverts tanks. $350.00 each or $2100 ntire lot loaded on your truck

•

## NEW CORRUGATED CULVERTS

arge Stock, all sizes, galvanized
Can arrange delivery

•

**LRAY KOCKE SERVICE INC.**
hone GR 3-8275 P. O. Box 148
Donaldsonville, La.


## Commercial Members of the AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC.

**AMERICAN MOLASSES CO., OF LOUISIANA, INC.**
400 N. Gayoso St.
New Orleans, La.

**HARRY L. LAWS & CO., INC.**
126 Carondelet Street
New Orleans 12, La.

**THE HIBERNIA NATIONAL BANK**
New Orleans, La.

**LAMBORN & COMPANY, INC.**
Whitney Building
New Orleans, La.

**LEBOURGEOIS BROKERAGE CO.**
823 Perdido Street
New Orleans, La.

**THE NATIONAL BANK OF COMMERCE**
New Orleans, La.

**NATIONAL SUGAR REFINING CO.**
Carondelet Bldg.
New Orleans, La.

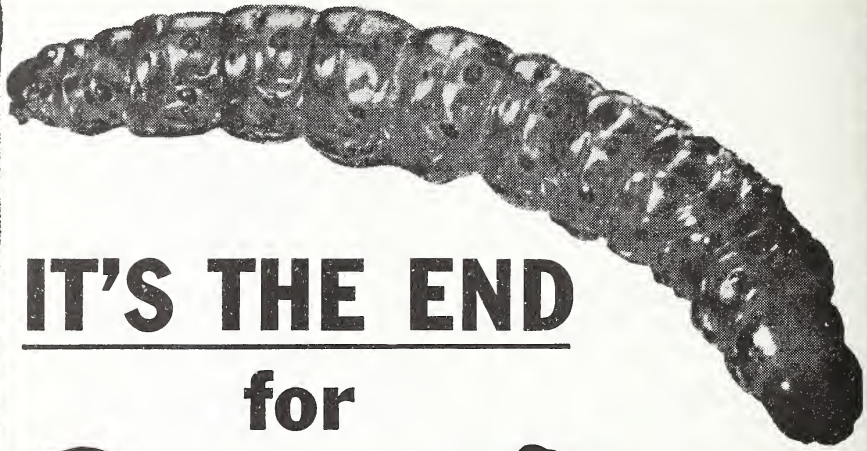
**PENICK & FORD LTD., INC.**
National Bank of Commerce Bldg.
New Orleans, La.

**ESSO STANDARD OIL COMPANY**
(Louisiana Division)
P. O. Box 1250 New Orleans 10, La.

**STANDARD SUPPLY & HARDWARE CO., INC.**
822 Tchoupitoulas St.
New Orleans, La.

**STATE AGRICULTURAL CREDIT CORP., INC.**
837 Whitney Building
New Orleans, La.

**WHITNEY NATIONAL BANK**
New Orleans, La.



# IT'S THE END for Sugar Cane Borer!

# endrin

The days when sugar cane borer strikes and steals a lion's share of your hard-earned profits are over. You can fight back with endrin insecticide . . . it's the end for sugar cane borer.

Endrin has been thoroughly tested and approved for control of sugar cane borer. For best results, apply endrin granules by air.

Put an end to sugar cane borer damage this season. Use endrin! It's available from your insecticide dealer. Don't delay—see him today!

**SHELL CHEMICAL CORPORATION**

AGRICULTURAL CHEMICALS DIVISION

119 South Claiborne Avenue, New Orleans 12, Louisiana

SHELL

3.61
.35
La. State University Library
Acquisitions Dept.
Baton Rouge 3, La.
LOUISIANA STATE UNIVERSITY CHEMISTRY LIBRARY

# THE SUGAR BULLETIN

LOUISIANA STATE UNIVERSITY LIBRARY

38—No. 16 MAY 15, 1960

*ial Bulletin of the American Sugar Cane League of the U. S. A.*

## WHAT YOUR LEAGUE DUES DO FOR YOU

Louisiana cane farmers may grow and harvest as large a cane acreage as they desire this year and next year, due to the efforts of the American Sugar Cane League. Sugar Act amendments recommended by the League and approved by Congress in 1956 have resulted in bigger annual sugar marketing quotas for Louisiana. This, in turn, has permitted the removal of acreage restrictions on growers.

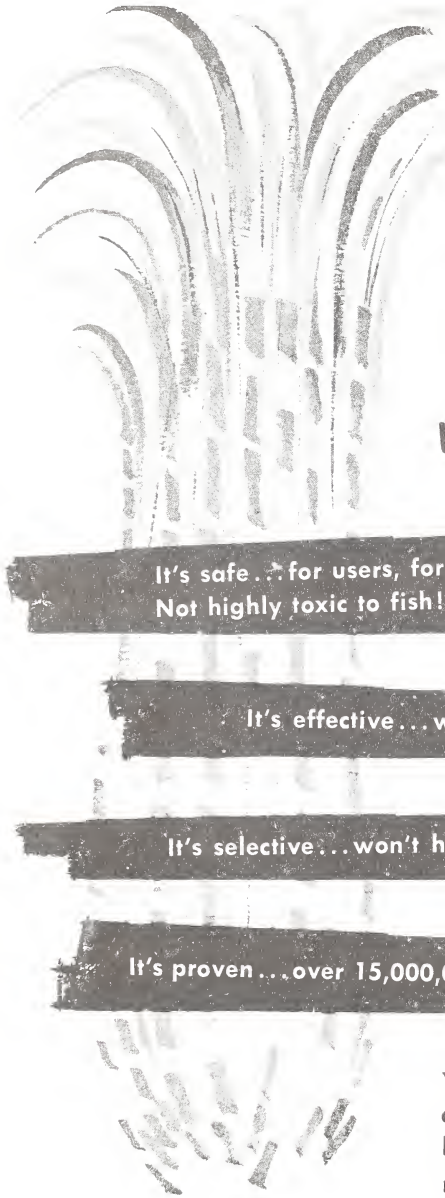
Louisiana got more marketing quota not just because it was needed. The facts which were the basis for the need and the justification for the quota increase had to be presented to the right people. The "right people" in this case included spokesmen for all other domestic sugar producing areas, the U. S. Department of Agriculture, the U. S. Department of State, and the U. S. Congress.

The League has a Legislative Committee which furnishes the leadership in supplying the facts about the Louisiana sugar industry. However, this Committee, whose members serve without pay from the League, cannot do the job without the help of the paid personnel in the League's offices in New Orleans and Washington, D. C. Part of your League dues are used to pay this personnel and to cover the other operating expenses of these offices.

**Your League dues have made it possible for you to have a larger cane acreage. Just this one accomplishment gives every grower the opportunity to earn an additional amount of money which far exceeds the 1½ cents per ton of cane he pays as League dues.**

*Warren Harang, Jr.,*
*President.*

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry



you can control

Sugar Cane Borer

right up to harvest

with Ryania!

It's safe . . . for users, for livestock, for wildlife!
Not highly toxic to fish! Permits use of bagasse for feed!

It's effective . . . won't develop resistant strains!

It's selective . . . won't harm beneficial insects!

It's proven . . . over 15,000,000 pounds used in the past 12 years!

Year after year more and more growers depend on Ryania. This year, as in the past, let Ryania protect *your* crops.

Ryania is covered by Patent Nos. 2,400,295 and 2,590,536.

Distributed by
BARTLETT CHEMICALS, INCORPORATED
New Orleans, Louisiana
THOMPSON-HAYWARD CHEMICAL CO.
New Orleans, Louisiana

PENICK

*Farm Chemical and Insecticide Division*

S. B. PENICK & COMPANY · 100 CHURCH ST., NEW YORK 8 · 735 W. DIVISION ST., CHICAGO

# THE SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Editor

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

**Issued on the 1st and 15th of each month.** **Subscription: Member 50 cents a year. Non-Members $3.00 a year.**

**Washington Office, 510 Union Trust Bldg., Washington, D. C.**
**Josiah Ferris, Manager**



**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

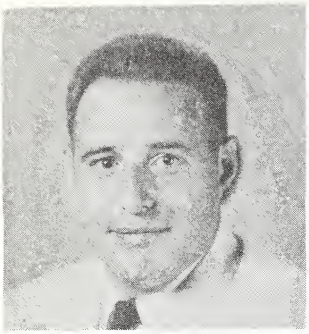
**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
W. F. Giles, Jeanerette, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.


*We stand for the encouragement of Home Industries as against Foreign Competition*



# IN THE FIELD WITH LLOYD LAUDE

*by Lloyd L. Lauden*

### Technologists Meeting

The American Society of Sugar Cane Technologists will hold its summer meeting on June 2, 1960 in the American Legion Hall, Thibodaux, La. The meeting will begin at 9:30 in the morning. Dr. Leo Hebert, Houma, Chairman of the Agricultural Section and Mr. James N. Foret, Jr., Supreme, Chairman of the Manufacturing Section have arranged a very interesting program. Below is an outline of the program.

AGRICULTURAL SECTION

*Morning Session*

Breeding in Sugar Cane With Special Reference to Kinds of Material. By Dr. H. T. Henderson, Louisiana State University, Baton Rouge, Louisiana.

Weed Control at Smithfield. By Mr. Louis Arceneaux, Smithfield Plantation, Port Allen, Louisiana.

Sugar Cane Mosaic-Vector Studies in Louisiana. By Mr. Leon Charpentier, U. S. Dep't. of Agriculture, Houma, Louisiana.

The 4-H Club Sugar Cane Projects in Louisiana. By Mr. Conr Gautier.

MANUFACTURING SECTION

*Afternoon Session*

Mill Settings. By Mr. A. Chirgwin, Farrel - Birmingha Corp.

The Filtration of Cane Mu with Fas-Flo Filters. By Mr. Do ald K. Luke, Jr., Suchar Sal Corp.

Continuous Diffusion Expe ments. By Mr. Harold F. Silve Silver Engineering Works, Inc.

Evaporator Control. By Mr. G. Ziegler, Taylor Instrument C

### Crop Late

In spite of the cool weather r ceived last week the crop has show a gradual improvement over the pa two weeks. Stands along Bayou L fourche and on the Teche have pro ably shown the greatest improv ment. Stands in and around Whi Castle, La. and in and around S James, La. have improved, but i general, stands are well below e

(Continued on page 206)

## *In This Issue*


What Your League Dues Do for You ..... 197

In The Field With Lloyd L. Lauden ..... 199
**Technologists Meeting—Crop Late**

In Washington With Joe Ferris ..... 200
**Florida Crop Ends—Smathers' Sugar Bill**

Control Of Sugarcane Borer With Insecticides ..... 201

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*

### Florida Crop Ends

U. S. Sugar Corporations' harvest ps all records. The current harvest ason came to a close April 25th. ne corporation harvested 1,359,806 ns of sugar cane which produced 34,432 tons of 96° sugar. All-time oduction records were broken this ar despite serious freeze damage hich caused an estimated loss of ap-oximately 10,000 tons of sugar.

### Smathers' Sugar Bill

The Smathers' Sugar Bill made its ppearance May 9th. The measure, four year proposal would broaden ne base from which U. S. sugar sup-ies are obtained and encourage for-gn countries to make purchases in ne United States by adopting a new rmula for allocating sugar quotas. his formula takes into account for-gn trade relations with the United tates.

According to Senator Smathers, is bill would—

"1. restrict Cuba's quota to the asic quota established for Cuba un-er the 1956 Act. (2,808,000 tons). he incremental quotas accruing to uba by virtue of the growth of the nited States market since 1956, ome 310,695 tons, would be distrib-ted among domestic United States uppliers and friendly foreign sup-liers."

"Of this amount the bill would dis-ribute 200,000 tons to the domestic roducing areas of which 150,000 ons would go to the beet producing reas and 50,000 tons to the mainland ane producing areas. This is the ame allocation to the domestic areas s made in the bills introduced by my distinguished colleagues the senior Senators from Utah and Louisiana."

"The remaining 110,695 tons would be distributed among other foreign suppliers including new countries seeking to enter the United States market, on the basis of an index which takes into account their average annual purchases from the United States as well as their existing statutory quotas, if any, in the United States Market."

"The Cuban share of the growth in the United States sugar market presently amounts to approximately 30%. The bill would distribute one-third of that growth to new areas in the continental United States for the production of domestic sugar beet or mainland cane."

"The remaining portion of Cuba's share of the growth would be distributed among other foreign suppliers including not only present suppliers but also new countries seeking to enter the United States market for the first time. This distribution also would be made on the basis of an index derived from average annual purchases from the United States over the past four years and existing statutory quotas. For the first time, it would also give the Republic of the Philippines a share in the growth of the United States market. The new countries included for a share in United States market growth by virtue of this reform would include Brazil, Colombia, El Salvador, Ecuador, Guatemala and the Philippines."

"3. Give the President power to

(Continued on page 206)

# CONTROL OF THE SUGARCANE BORER WITH INSECTICIDE

*W. H. Long,[2] E. J. Concienne,[2] S. D. Hensley,[3] W. J. McCormick,[3] and L. D. Newson[2]*

The sugarcane borer, *Diatraea saccharalis* (F.), has been the most serious and destructive insect attacking sugarcane in Louisiana for many years. Present estimates indicate that cane growers of the State have suffered an average annual loss to the sugarcane borer amounting to about 13% of their sugar yields since 1937.

Sodium fluosilicate, cryolite, and ryania dusts have been recommended and used succesivsely for cane borer control in Louisiana since the early 1920's. A dust containing 40% ryania applied at weekly intervals was used almost exclusively by growers for control of the borer for several years prior to 1958.

A summary of results from more than 20 field tests conducted by Dugas *et al.* (1947-1955) indicates that four weekly applications of ryania dust for control of second generation borers gave 48±15% (95% confidence interval) control based upon the percentage of joints bored at harvest. This degree of control gave an average yield increase of 1018±686 pounds of sugar per acre. In other tests eight weekly applications of ryania dust for control of both second and third generation borers showed 68 ±11% control with an average yield increase of 1433±606% pounds of sugar per acre.

Dugas *et al.* (1952) were first to try endrin for sugarcane borer control in Louisiana. In 1951 they obtained 49% control of sugarcane borers in a field test using an experimental formulation of endrin dust as compared with 97% control from comparable ryania treatments.

In 1955 Dugas *et al.* (1956) showed 50 and 56% control of borers at harvest from four and eight applications of 2% endrin dust, respectively. They found accompanying yield increases of 1004 and 1675 pounds of sugar per acre, respectively. In the same test four and eight applications of 40% ryania dust gave 23 and 45% cont with estimated yield increases of 4 and 1,181 pounds of sugar per ac respectively. In spite of these resu they concluded that "there is no pl for organics in the cane area as whole, because of their toxicity to t natural enemies of the borer."

In the presence of accumulated d which indicated that some bo control accompanied by surprising large increases in crop yields co be obtained by using from four eight applications of 40% ryan dust, most growers did not take f advantage of recommended chemi control practices. Those who did u ryania or cryolite usualy made fo weekly insecticide applications f control of second generation bore and often supplemented these insec cide applications with release of *T chogramma* egg parasites.

Endrin was first recommended f control of the sugarcane borer Louisiana in 1958 (Long *et al.*, 1958 Field tests conducted since 1955 wi endrin and other insecticides are co sidered in this paper.

## Methods of Procedure

Insecticides were applied by ai plane to large-plot tests since aeri application is the most common an often the only practical or possib means of applying chemicals to larg acreages of sugarcane. In a smal plot test insecticides were appli from a quart-size glass fruit ja equipped with a metal top in whic several holes were punched. The ja was inverted and fastened at an ang to one end of a long pole so that gran ulated insecticides could be sprinkle over the row from above the tops o tall cane while the worker walked i the middle between rows.

Attempts were always made to ap ply all of the insecticide formulation used at the uniform rate of 12 pound per acre per application. The actua rate of application on a few larg

able 1.—Summary of results from large-plot insecticide eriment conducted on the Bubenzer Farm near Bunkie, isiana, during 1956.[a]

| Treatments[b] | Per Cent Joints Bored | Yield Increase per Acre | |
|---|---|---|---|
| | | Tons of Cane | Pounds of Sugar |
| nia 40% dust | 20 | 2.4 | 1085 |
| aphene 20% dust | 14 | 4.4 | 998 |
| rin 2% dust | 2 | 6.6 | 1847 |
| rin 2% granules | 1 | 6.7 | 2050 |
| reated | 64 | 21.7[c] | 2429[c] |
| ey's D[d] | 22 | 7.2 | 1179 |

Sugarcane varieties C.P.36-13 and C.P.36-105, plant cane. Figures are ages of 4 replications.
Eight applications of each insecticide were made at weekly intervals.
Actual yields for untreated plots.
Differences required for significance at the 5% level.

ots differed appreciably from that ended.

Airplane-treated plots ranged from to more than 10 acres, their size d shape commonly being deter- ned by the size, shape, and number cuts comprising the field to be ated. In the small-plot test, plots re three rows wide and 24 feet long /100 arce).

The direct effects of treatments up- borer populations were estimated determining the percentage of nts or internodes having external ns of borer tunneling at the time of rvest.

Yields from large plots were esti- ated by weighing machine-cut cane m 300 row-feet, or by hand-cutting d weighing several 1/100-acre sam- s from each plot. Weights were vays taken from areas approxi- ately equidistant from the sides of plots and not closer than 50 feet m the nearest headland. Weights re obtained in small plots by hand tting and weighing all of the cane each plot.

Juice analyses for sucrose and brix ntent were made on the juice from to 30 stalks selected at random m each plot.

A complete block experimental de- n was employed in all of these field periments with treatments assigned random to each block.

## Results

*1956 Test.*—Eight applications of h insecticide listed in table 1 were de by airplane at weekly intervals large plots of sugarcane located near Bunkie, Louisiana.

Table 2.—Summary of results from large-plot insecticide experiment conducted on the Island Planting Company Farm near Bunkie, Louisiana, during 1957.[a]

| Treatments[b] | Per Cent Joints Bored | Yield Increase or Decrease per Acre | |
|---|---|---|---|
| | | Tons of Cane | Pounds of Sugar |
| Endrin (4) 2% dust | 43 | − 1.8 | − 451 |
| Endrin (8) 2% dust | 34 | 2.4 | − 40 |
| Endrin (4) 2% granules | 5 | 8.4 | 1446 |
| Endrin (8) 2% granules | 2 | 8.0 | 1450 |
| Toxaphene (4) 20% dust | 34 | 1.3 | 504 |
| Toxaphene (8) 20% dust | 20 | 3.8 | 927 |
| Toxaphene (4) 20% granules | 17 | 3.4 | 1190 |
| Toxaphene (8) 20% granules | 13 | 0.6 | 392 |
| Untreated | 52 | 27.5[c] | 4270[c] |
| Tukey's D[d] | 22 | 4.9 | 1860 |

[a] Sugarcane variety C.P.36-13, plant and second ratoon crops. Figures are averages of 4 replications.
[b] Parentheses contain the number of insecticide applications made (8 weekly or 4 biweekly).
[c] Actual yields from untreated plots.
[d] Differences required for significance at the 5% level.

Bored joint counts made at harvest show that endrin dust or granules gave almost complete control. Toxaphene and ryania treatments gave 78 and 69% control, respectively. The difference between each treatment and the check was greater than that required for significance at the 5% level.

Treatment with endrin dust or granules resulted in yield increases of more than 6 tons of cane and approximately 1 ton of sugar per acre. The differences in yields of sugar per acre between plots treated with endrin and plots which received no insecticide treatment were greater than the amount required for significance at the 5% level. Yield increases following treatment with toxaphene or ryania were about half as large as those found in endrin-treated plots.

*1957 Test.*—Endrin and toxaphene were applied by airplane to large plots of sugarcane grown by the Island Planting Company near Bunkie, Louisiana. Table 2 gives the results from this test in which eight weekly applications of each insecticide were made for control of both second and third generation borers.

Endrin granules gave the best control obtained in this test. Results with toxaphene were generally intermediate between those for endrin granules on the one hand and endrin

(Continued on next page)

dust on the other. Insecticide granules always gave better control than comparable dust formulations. Eight weekly insecticide applications were generally superior to four biweekly applications, but the difference between four and eight applications was relatively small when granular formulations were applied. An analysis of variance of the bored joint data showed that the average differences between weekly and biweekly insecticide applications, and between dust and granulated formulations were significant at the 1% level. The interaction between insecticides and formulations (carriers) was also significant at the 1% level.

The largest yields of cane and sugar per acre were found in plots receiving four or eight applications of endrin granules. These treatments increased yields by approximately 8 tons of cane and ¾ ton of sugar per acre. Applications of endrin dust gave no important yield increases. Plots treated with toxaphene yielded more cane and sugar per acre than check plots, but less cane and sugar per acre than plots treated with endrin granules. An analysis of variance showed that the average difference in yield of sugar per acre between dust and granule-treated plots was significant at the 1% level. The interaction between insecticides and formulations (carriers) was also significant at the 1% level.

*1958 Demonstration Plots.*—Table *3* is a summary of results from large

Table 3.—Summary of results from large demonstration plots located in several parishes of southern Louisiana during 1958.[a]

| Treatments[b] | Per Cent Joints Bored | Yield Increase per Acre | |
|---|---|---|---|
| | | Tons of Cane | Pounds of Sugar |
| Endrin 2% granules | 7 | 7.4 | 1194 |
| Ryania[c] dust and granules | 32 | 3.3 | 665 |
| Untreated | 37 | 25.4[d] | 4757[d] |
| Tukey's D[e] | 11 | 3.9 | 822 |

[a] Figures are averages of 7 replications located on 7 different plantations in 6 different parishes of southern Louisiana. The sugarcane variety C.P.44-101, C.P.48-103 or C.P.36-13 was grown in all demonstration plots on each plantation.

[b] Four applications of each insecticide were made at biweekly intervals.

[c] Forty per cent ryania granules were used in 3 replications and 40 % ryania dust in the remaining 4.

[d] Actual yields from untreated plots.

[e] Differences required for significance at the 5% level.

demonstration plots located on sev different plantations in six differe parishes of southern Louisiana. Fo biweekly applications of endrin a ryania for control of second and thi generation borers were compar with no treatment. An experimen granulated formulation containi 40% ryania was used on three plan tions, and the commonly used 40 ryania dust was used on the remai ing four.

Two per cent endrin granules ga much better control than was a forded by the ryania treatments. T effects of ryania dust and granu were averaged together since t average difference between them control obtained was only 3%. T difference in percentage of join bored between endrin-treated a ryania-treated or untreated plots w larger than that required for signi cance at the 5% level.

Data presented in table *3* show th yield increases on endrin-treat plots about twice as large as tho measured in ryania-treated plots. T differences between yields of ca and sugar per acre from endri treated and untreated plots we greater than the amounts requir for significance at the 5% level. T average difference in yield of ca per acre between endrin- and ryan treated plots was greater than th required for significance at the 5 level.

*1958 DDT Test.*—Four biweek applications of 5% DDT granu were compared with comparal treatments of 2% endrin granu and 40% ryania dust in large pl on Waterford Plantation in St. Charles Parish.

Data given in table 4 show that e drin gave far better control of bor than either of the other insectici used. The difference in percentage joints bored between ryania-treat and untreated plots was the only c among all possible comparis which was not as large as the diff ence required for significance at t 5% level. Treatment with DDT sulted in a significant increase

ıble 4.—Summary of results from large-plot insecticide riment conducted on Waterford Plantation in St. Charles sh, Louisiana, during 1958.[a]

| Treatments[b] | Percentage Joints Bored | Yield Increase or Decrease per Acre | |
|---|---|---|---|
| | | Tons of Cane | Pounds of Sugar |
| 5% granules | 50 | − 2.0 | − 482 |
| in 2% granules | 7 | 11.1 | 1191 |
| ia[c] dust and granules | 35 | 3.2 | 294 |
| eated | 32 | 29.9[d] | 4689[d] |
| y's D[e] | 4 | 5.3 | 730 |

garcane variety C.P.44-101, first ratoon. Figures are averages of 4 repli-s.
ur applications of each insecticide were made at biweekly intervals. rst application with 40% ryania dust; last 3 applications with 40% granules.
tual yields from untreated plots.
ifferences required for significance at the 5% level.

er damage.

Average yield increases of slightly re than 11 tons of cane and more n ½ ton of sugar per acre resulted m four biweekly applications of lrin granules. Relatively small in-ases in yield followed treatments h ryania. Estimated yields were ually smaller in DDT-treated plots n in check plots which received no ecticide treatment.

*958 Small-Plot Test.*—Granulated mulations of several insecticides re compared in a small-plot test ducted on Belleview Plantation r Franklin, Louisiana. (Table 5). our biweekly applications of en-n, Thiodan® (6,7,8,9,10, 10-hexa-l o r o-1,5,5a,6,9,9a-hexahydro-6,9-thano-2, 4, 3 -benzodioxathiepin- 3-de), heptachlor, and Sevin® (1-hthyl-*N*-methyl carbamate), re-ctively, caused appreciable reduc-ıs in borer damage. Treatments h Trithion® (*S*(*p*-chlorophenyl-o methyl *O,O*-diethyl phosphoro-ıioate) or ryania suppressed borer nage to some extent. DDT was ap-ently responsible for an increase orer damage. The injury suffered lots treated with endrin, Thiodan, tachlor, and Sevin differed signif-ıtly at the 5% level from that nd in untreated plots. Endrin and odan gave significantly better trol than any other insecticide ıtments.

ignificant increases in yield of e and/or sugar per acre followed ıtment with endrin and Thiodan,

Table 5.—Summary of results from small-plot insecticide experiment conducted on Belleview Plantation near Franklin, Louisiana, during 1958.[a]

| Treatments[b] | Per Cent Joints Bored | Yield Increase or Decrease per Acre | |
|---|---|---|---|
| | | Tons of Cane | Pounds of Sugar |
| Endrin 2% granules | 5 | 6.1 | 1353 |
| Thiodan 5% granules | 5 | 5.0 | 1026 |
| Sevin 5% granules | 26 | 3.9 | 632 |
| Heptachlor 5% granules | 16 | 3.4 | 463 |
| Trithion 5% granules | 32 | 3.8 | 784 |
| DDT 5% granules | 47 | − 1.0 | − 564 |
| Ryania 40% granules | 32 | 2.8 | 421 |
| Ryania 30% granules | 32 | 2.8 | 417 |
| Untreated | 40 | 24.5[c] | 5649[c] |
| Tukey's D[d] | 10 | 4.4 | 1044 |

[a] Sugarcane variety C.P.44-101, first ratoon crop. Figures are averages of 6 replications.
[b] Four applications of each insecticide were made at biweekly intervals
[c] Actual yields from untreated plots.
[d] Differences required for significance at the 5% level.

respectively. Favorite responses in yield were measured following treatment with all of the other insecticides used except DDT, which was apparently responsbile for some decrease in yield.

## Discussion

The weight of accumulated data points conclusively to the fact that endrin is a far better chemical for controlling the sugarcane borer than any other that has been so thoroughly tested at this time. For this reason it is the only inseticide currently recommended by the Louisiana Agricultural Experiment Station for borer control on sugarcane.

Four biweekly applications of 2% endrin granules broadcast at the rate of 12 pounds per acre have given very good control of second and third generation cane borers. During 1958 the average total cost of four airplane applications of endrin granules was slightly less than $10.00 per acre. This means to the grower that he must obtain an increase of slightly more than 1 ton of standard cane per acre to pay for the cost of treatment. The data reported herein show average yield increases ranging from 6 to 11 tons of cane per acre following treatment with endrin.

Though endrin is now widely accepted by Louisiana sugarcane growers as the best control for the sugarcane borer, there was early opposi-

(Continued on next page)

STATE UNIV. LIBRARY

tion to its use by some who feared that the use of an organic insecticide for borer control in Louisiana's Sugar Belt might eliminate some important natural enemies of the borer and thereby increase the overall problem of borer control. Data presented above for DDT and other data collected by Long *et al.* (1958) show that such upsets can and have occurred following insecticide use in sugarcane fields.

## References Cited

Dugas, A. L., and others. 1947-1955. Sugarcane insect investigations. (Annual mimeo. reports to the Contact Committee of the American Sugar Cane League.)

Dugas, A. L., E. J. Concienne, and Charles Sanders. 1952. Sugarcane insect investigations 1951. (Mimeo. report to the Contact Committee of the American Sugar Cane League.)

Dugas, A. L., E. J. Concienne, and L. Sibley. 1956. Sugarcane insect investigations 1955. (Mimeo. report to the Contact Committee of the American Sugar Cane League.)

Long, W. H., E. J. Concienne, L. D. Newsom, S. D. Hensley, and Ralph Mathes. 1958. Recommendations for controlling sugarcane borer. Sugar Bulletin 36(10): 129-30.

Long, W. H., E. A. Concienne, R. N. Dopson, and L. D. Newsom. 1958. Fire ant eradication program increases damages by the sugarcane borer. Sugar Bulletin 37(5): 62-3.

[1] Accepted for publication March 6, 1959.

[2] Louisiana Agricultural Experiment Station, Baton Rouge, La.

[3] Agricultural Research Service, U. S. Department of Agriculture.

—o—

## IN THE FIELD

(Continued from page 200)

pectations for the area at this time.

N.Co. 310, a variety which is usually late to establish stands in stubble cane is later than usual this year. It is also true that all other varieties are later than usual in establishing stands this year. Plant cane of N.Co. 310 is suckering well generally throughout the belt. Many growers who considered destroying some N.Co. 310 stubble cane three weeks ago have good stands in these fields.

C.P. 52-68, the most recently released variety, is up to a very good stand both in plant cane and in stubble cane generally through the b The variety is suckering well at t time. Most growers appear very i pressed with this new variety. T variety has a good yielding abil and has done well on both light a heavy soils.

Growers are encouraged to ch C.P. 52-68 carefully for mosaic d ease. The variety is susceptible mosaic disease and the diseased pla should be rogued out beginning n and this roguing should be repea every two weeks until the cane comes too tall to see the disease. T should be done in all cane that planned to be used for seed this f Growers should also check N.Co. 3 and C.P. 44-101 for mosaic disea

Stubble cane of C.P. 44-101 is su ering well generally throughout t belt. Plant cane of this variety just beginning to sucker now. Gro ers are again reminded not to pe soil on top of the row at this tir particularly in this variety.

Up to now most growers are doi a good job of controlling grass this crop. It is hoped that rainf will be such that grass can be k under control. After last year, wh it was almost impossible to cont grass in the crop, a good grass c trol year will be welcomed.

—o—

## IN WASHINGTON

(Continued from page 201)

further reduce the quota of Cuba any calendar year when he finds a proclaims that such action is nec sary in the public interest or to sure an adequate supply of sug Any reduction so made would be fective only for the calendar year which the President made such finding, and would not change p manent quotas. The replaceme purchases would be distributed 65 to domestic sugar producing are and 35% to foreign sugar produci areas."

"4. The bill allots to the domes beet sugar areas and the mainla cane sugar areas any deficits deriv from Hawaii."

"It allots to all foreign suppliers cept Cuba deficits derived from erto Rico and the Virgin Islands." "The deficit allocations to the for-n countries again take in new sup-ers and are again based on an in-x of the four-year purchases of all these suppliers from the United ates and their existing quotas. The posal would insure that each of ese new suppliers is permitted to ke sugar sales in the United States at least five thousand (5000) ns."

"5. The bill would reduce the ount of direct consumption sugar ich may be imported from Cuba m 375,000 tons to 75,000 tons. ile this provision will have no ect upon the amount of sugar ba can otherwise sell in this mar-, it will insure that at least 300,-) tons of additional sugar imported o the United States come in raw m and be refined in the United ates by United States refineries."


**BOILER SHELLS**

- 72" x 18' Ideal for culverts tanks. $350.00 each or $2100 ntire lot loaded on your truck

•

**NEW CORRUGATED CULVERTS**

arge Stock, all sizes, galvanized
Can arrange delivery

•

**LRAY KOCKE SERVICE INC.**

hone GR 3-8275 P. O. Box 148
Donaldsonville, La.


## Commercial Members of the AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC.

AMERICAN MOLASSES CO., OF LOUISIANA, INC.
400 N. Gayoso St.
New Orleans, La.

HARRY L. LAWS & CO., INC.
126 Carondelet Street
New Orleans 12, La.

THE HIBERNIA NATIONAL BANK
New Orleans, La.

LAMBORN & COMPANY, INC.
Whitney Building
New Orleans, La.

LEBOURGEOIS BROKERAGE CO.
823 Perdido Street
New Orleans, La.

THE NATIONAL BANK OF COMMERCE
New Orleans, La.

NATIONAL SUGAR REFINING CO.
Carondelet Bldg.
New Orleans, La.

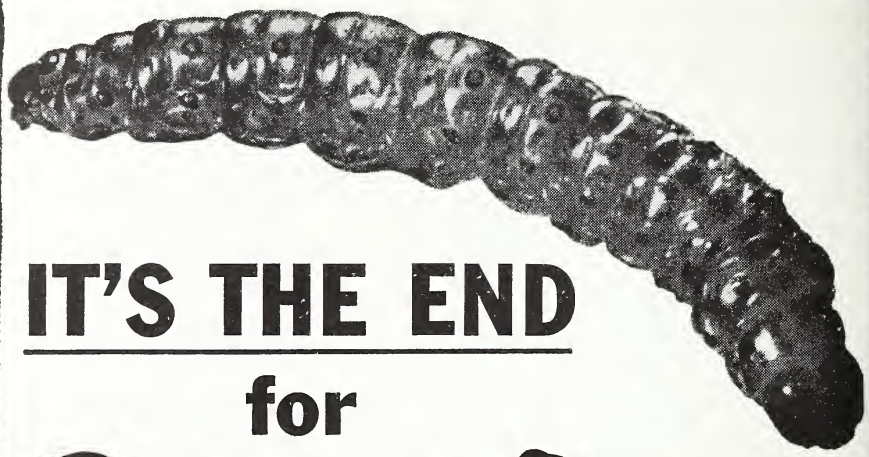
PENICK & FORD LTD., INC.
National Bank of Commerce Bldg.
New Orleans, La.

ESSO STANDARD OIL COMPANY
(Louisiana Division)
P. O. Box 1250 New Orleans 10, La.

STANDARD SUPPLY & HARDWARE CO., INC.
822 Tchoupitoulas St.
New Orleans, La.

STATE AGRICULTURAL CREDIT CORP., INC.
837 Whitney Building
New Orleans, La.

WHITNEY NATIONAL BANK
New Orleans, La.



# IT'S THE END for Sugar Cane Borer!

# endrin

The days when sugar cane borer strikes and steals a lion's share of your hard-earned profits are over. You can fight back with endrin insecticide . . . it's the end for sugar cane borer.

Endrin has been thoroughly tested and approved for control of sugar cane borer. For best results, apply endrin granules by air.

Put an end to sugar cane borer damage this season. Use endrin! It's available from your insecticide dealer. Don't delay—see him today!

**SHELL CHEMICAL CORPORATION**

AGRICULTURAL CHEMICALS DIVISION

119 South Claiborne Avenue, New Orleans 12, Louisiana

SHELL

La. State University Library
Acquisitions Dept.
Baton Rouge 3, La.

LOUISIANA STATE UNIVERSITY LIBRARY

LOUISIANA STATE UNIVERSITY LIBRARY

# THE SUGAR BULLETIN

38—No. 17 JUNE 1, 1960

*ial Bulletin of the American Sugar Cane League of the U. S. A.*

PRINTED ON PAPER MADE FROM
LOUISIANA SUGAR CANE BAGASSE

## *In This Issue*

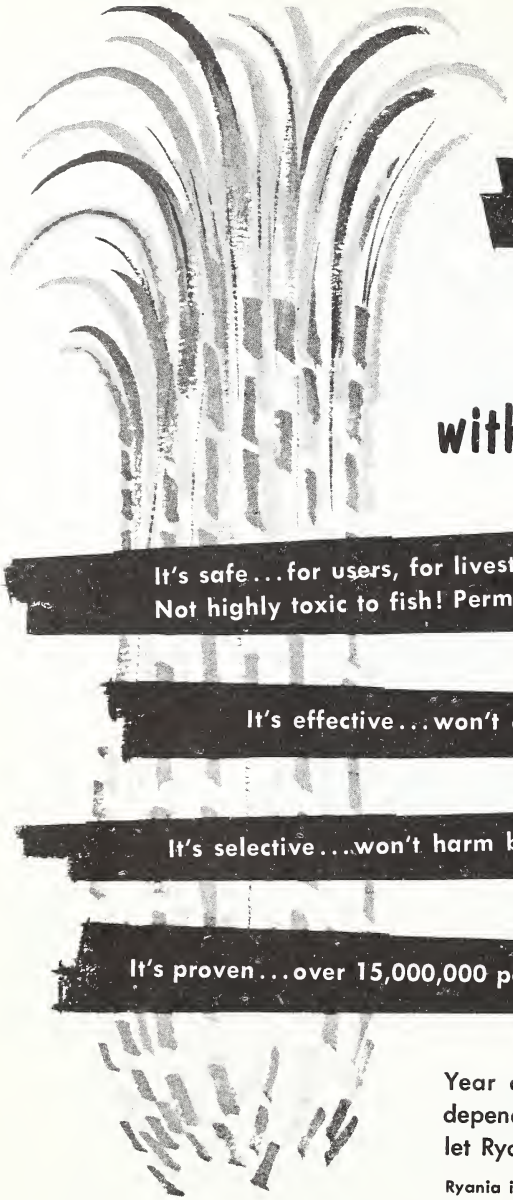
Up Front With The League ..... 212
**The Old Mule—F. M. Burley Jr., Elected—Terrill Heads Harry L. Laws**

In The Field With Lloyd L. Lauden ..... 213
**Crop Conditions And Weed Control**

In Washington With Joe Ferris ..... 214
**Cooley Introduces Sugar Bill—Senator Long's Position**

Effect Of Time Of Harvest On Yield Of Sugarcane And Sugar At Houma, Louisiana From 1953 to 1956 ..... 215

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry



you can control

Sugar Cane Borer

right up to harvest

with Ryania!

It's safe... for users, for livestock, for wildlife!
Not highly toxic to fish! Permits use of bagasse for feed!

It's effective... won't develop resistant strains!

It's selective....won't harm beneficial insects!

It's proven... over 15,000,000 pounds used in the past 12 years!

Year after year more and more growers depend on Ryania. This year, as in the past, let Ryania protect *your* crops.

Ryania is covered by Patent Nos. 2,400,295 and 2,590,536.

**Distributed by**
**BARTLETT CHEMICALS, INCORPORATED**
New Orleans, Louisiana
**THOMPSON-HAYWARD CHEMICAL CO.**
New Orleans, Louisiana

PENICK

*Farm Chemical and Insecticide Division*
**S. B. PENICK & COMPANY · 100 CHURCH ST., NEW YORK 8 · 735 W. DIVISION ST., CHICAGO**

THE
# SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

(Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Editor

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

**Issued on the 1st and 15th of each month.** **Subscription: Member 50 cents a year. Non-Members $3.00 a year.**

**Washington Office, 510 Union Trust Bldg., Washington, D. C.**
**Josiah Ferris, Manager**

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
F. M. Burley, Jr., Youngsville, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

# UP FRONT WITH THE LEAGUE

*by A. W. Dykers*

## The Old Mule

Our sugar market character, The Old Mule, is an unpredictable cuss—nobody ever knows how he will react to developments. There was a time when he, along with his "world" sidekick, would have taken off like a scared rabbit if as many swords had been rattled as were clanged together in Paris a couple of weeks ago, but he did nothing. In fact the so called "world" price has dropped off a couple of points since the "Summit" and the Domestic price has remained a weak 6.05.

Futures in the far months have shown some slight strength, however, and we quote from the *Weekly Sugar Letter* of Merrill Lynch, Pierce, Fenner & Smith dated May 20th to throw some light on this development.

"Perhaps the most important basic source of strength in futures is the expected quota deficits in Puerto Rico and Hawaii. The theory is that the U.S.D.A. won't reallocate these deficits until there is more evidence of tightness, as expressed in the behavior of prices."

"Under present quotas, pressures from Cuba and the Philippines will gradually abate. Cuba has shipped nearly 54 per cent of her quota vs. 46 per cent last year. Philippine arrivals are over 10 per cent ahead of last year. The smaller full-duty suppliers have more quota left than last year. But it now seems that Puerto Rico will have a very large deficit near 300,000 tons while Hawaii will again have a deficit near 100,000."

"According to recent reports from Puerto Rico, the best crop estimate is not over 965,000 short tons. Production to May 15th amounted to 829,957 tons vs. 963,335 a year earlier. (Yield so far is 10.291 per cent vs. 10.706 a year ago from 29 mills in each case.) . . . In Hawaii, production for the week and for the season through May 7th amounted to 29,651 and 263,047 tons respectively. This compared to 28,700 and 309,792 in the period ending May 9, 1959."

## F. M. Burley Jr. Elected

F. M. Burley, Jr., prominent ca farmer in the Youngsville area h been unanimously selected by the E ecutive Committee of the Americ Sugar Cane League to fill the v cancy on the Committee created the death of Col. W. F. Giles.

Mr. Burley needs no introducti to the other members of the Louis ana sugar industry. He and his fa ily have been in the cane growi business in the western part of t sugar district for many years and is, most certainly, a valuable additi to the policy making body of t League. He was officially elected member of the Committee at the E ecutive Committee meeting held Thibodaux on May 25th.

## Terrill Heads Harry L. Laws

It is a pleasure for us to advise t readers of *The Sugar Bulletin* th E. B. Terrill, Jr., who has become seasoned Louisiana sugar plant since he took up his residence at Ci clare a couple of years ago, has bee elected President of Harry L. Law & Co., Inc.

In a letter dated May 18, 1960, M Stuart B. Sutphin, Jr., Chairma stated, "Berk Terrill came to us fro The Early & Daniel Company in Ci cinnati. The Directors of this Co pany feel very strongly that Mr. Te rill has the qualities and backgroun to afford the Company good admini tration for some time to come."

Mr. Terrill succeeds Mr. Sutphi as President of the Company. M Sutphin has been elected Chairma of the Board. R. O. Klausmeyer, a torney, Cincinnati, succeeds A. Pittman as Secretary of the Co pany—both of whom continue as D rectors; E. W. McNeil was re-electe Vice-President and General Manage and a Director of the Company; Rob ert Fraser, Vice-President of Sale and W. D. McCarthy was re-electe Treasurer and a Director of the Com pany.

# IN THE FIELD WITH LLOYD L. LAUDEN

*by Lloyd L. Lauden*

**op Conditions and Weed Control**

The crop has made a substantial provement in all areas in the past o weeks in both filling in stand and the amount of suckering. Most rieties are now suckering well. In ite of the improvement in stand d in suckering, growth rates are ry slow all over the belt. The crop still behind last year's crop in ight. Some growers in several eas are now reporting that stands e as good or better than their nds last year. Most growers, how-er, are still reporting some weak nt cane stands.

Growers generally agree that the op is being cultivated well. The op is generally clean at this time all areas. There are at least two od reasons why this crop is clean. rst, good cultivating weather has evailed thus far, and second, more reful attention, supervision, and nphasis were placed on the chemical ntrol program. The grassy crop of st year made a lasting impression many growers. Growers followed commended practices more closely is year, in the opinion of the writer.

Since grass and weed control is ch an important part of producing good crop of cane, growers will be ppy to hear that the League's re-uest for additional research on grass nd weed control at the U. S. D. A. ouma Sugar Experiment Station as been approved by the Senate ppropriations Committee of the .S. Congress. Senator Allen J. Ellen-er informed the League that the ommittee included $20,000 for weed ntrol research at the Houma Sta-on in Agriculture's appropriation ll. Concurrence is now needed by ne Senate and the House.

Grass and weed control experi-ents conducted by Mr. E. R. Stamper L.S.U. have been of tremendous lp to the Louisiana sugar industry. r. Stamper is continuing his work and this research will continue to benefit the industry. Even though some chemical is used on the greater part of the cane acreage, better chemicals and methods would be of substantial assistance to the economy of the industry. Additional research can supply this help. It is hoped that the $20,000 for weed control research at the U.S.D.A. Houma Station will be forthcoming. It is needed.

Of interest in weed control is the research done by Mr. C. G. McWhorter of the U.S.D.A. Agricultural Research Service and the Mississippi Agricultural Experiment Station and A.R.S. Agricultural engineer Mr. O. B. Wooten. This research work indidates that sub-surface spray application of weed killers may be an outstanding advance in weed control. The scientists and agricultural engineers believe that sub-surface spraying of various chemicals can be used several ways to control weeds in different crops. The researchers also report that smaller amounts of certain chemicals are required for subsurface application because the herbicides are volatile and can be accurately placed for greater efficiency in killing germinating weeds. As the weed killer slowly evaporates it moves up through the soil and kills germinating weeds.

The main parts of this sub-surface device are two V-shaped blades and spray nozzles. The spray nozzles discharge beneath the soil raised by the V-shaped blades.

Although it is difficult to imagine now how sub-surface spraying can be used beneath the top of the row in either plant cane or in stubble, research has shown the way to more difficult jobs than this. Of course roots of weeds growing in the center of the row may move out enough to reach chemicals placed under the surface of the side of the row.

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*

### Cooley Introduces Sugar Bill

Congressman Harold D. Cooley, Chairman of the House Committee on Agriculture, on May 19th, introduced a bill providing for a one-year extension of the Sugar Act unchanged.

"In view of the tragic situation now existing in Cuba and in view of the international implications involved," Mr. Cooley said, "I think we should proceed with great care and caution, and that we should not change or modify the quota provisions of the present Act at this time." He commented further:

"We should extend the Sugar Program for only one year and wait and see what happens in Cuba. By extending the Sugar Program without change or modification, neither Cuba nor any of the Full Duty countries now participating in the Program can be justified in accusing us of discrimination.

"Certainly our government should embark upon a program of economic aggression against Cuba or any other country, large or small. Certainly a farm program should be not used as a weapon of reprisal. We should not by unilateral action apply economic sanctions against any country which is a member of the Organization of American States.

"If the present program is to be extended for one year without change as provided in the bill which I introduced today, nothing can be accomplished by long, drawn out hearings. To open the quota provisions would only provide a forum for tirades which would have far-reaching international implications. So I hope that our Committee will report the bill without hearings. I further hope that the Rules Committee will grant us a closed rule. If the bill is considered under an open rule, the Sugar Program will be in jeopardy. You cannot write a sugar bill on the floor of the House any more than you can wr a tax bill on the floor of the Hou so I insist that the bill should be cc sidered under a closed rule."

Mr. Cooley's office has informed that he has scheduled an executi session of his committee for Wedne day, June 1, 1960, at 10:00 A.M. consider sugar legislation.

### Senator Long's Position

In the last issue of the Bulletin commented on Senator Long's su gestion for an immediate cut in t Cuban quota by asking —"What do Senator Long propose to do with t quota he would take from Cuba Following is a letter from Senat Long on that question.

"Dear Joe:

In your column in The Sugar Bulletin you ask the question, What does Senator Long propose to do with the quota that he would take from Cuba? I believe the attached press release answers that question.

As you know, the Sugar Bill will come before the Senate Finance Committee, of which I am a member. You may be sure that I have at heart the interest of our Louisiana producers, as well as the interest of everyone else that will be affected.

Looking forward to seeing you soon, I am, with best wishes,

Sincerely yours,
signed: Russell"

In Senator Long's press release, h said: — "We ought to impound th sugar quota that we allow Cuba unde our Sugar Act. Instead of payin Cuba about 5½ cents a pound fo sugar as we do at present, compare to Russia's price of less than 3 cent a pound to Cuba, the United State should establish a trading corpora tion.

"The trading corporation woul

(Continued on page 219)

# FFECT OF TIME OF HARVEST ON YIELDS OF SUGARCANE AND SUGAR AT HOUMA, LOUISIANA, FROM 1953 TO 1956

*By Leo P. Hebert and L. G. Davidson, Research Agronomists, Crops Research Division, United States Department of Agriculture*

Harvesting sugarcane in Louisi- d other sub-tropical areas is a ver-ending battle against freezing ather during the harvest season. he grower is faced with the alter- tive of harvesting a partially ma- re crop by starting early or delay- g harvesting to obtain maximum gar yields, but thereby running the k of damage to the crop by freezes. though growers recognize that sug- cane increases rapidly in value af- r the beginning of the harvest sea- n, they are also cognizant of the ngers involved in delaying harvest- g.

Early cutting of cane often ad- rsely affects stands of the succeed- g crop. This is especially true in ed plots which seldom give satis- ctory stubble stands when the plant ne is cut for seed in August. As e season advances, cutting has a ogressively less harmful effect on cceeding stands of cane.

The effect of freezes on the quality mill cane and succeeding stands cane must also be considered in ciding on the date of harvest. In number of field trials, cane left anding for as long as 6 weeks after vere killing freezes produced better ubble stands than that which was t immediately after the freeze. On e other hand, delays in harvesting at would later subject some of the op to freezing temperatures ex- cted in late November or in Decem- r endanger that part of the crop at is not harvested and often result total loss of it. The question then comes one of delaying harvesting long as possible to take advantage rapid improvement in maturity s much as 2 pounds of sugar per n per day in many cases) or risking e danger of exposure to low tem- ratures with subsequent losses in sugar and juice qualities.

## Experimental Technique

Experiments designed to measure relative maturity of different varieties are conducted annually at the U. S. Sugarcane Field Station, Houma, Louisiana, in connection with the routine evaluation of varieties for commercial utilization by the Louisiana industry. The manner in which these tests are conducted has been described in a previous report(4). Six to eight varieties to be evaluated are planted in a randomized-block design with 5 replications of 1/40-acre plots. Each plot is divided into 18 sub-plots for sampling. About October 1, a 10-stalk sample is taken at random from standing cane with due precautions to minimize introduction of any bias which could occur if only selected stalks were taken. Samples from 3 sub-plots are composited into a 30-stalk sample which is stripped of all leaves and uniformly topped at the last mature internode so that 25 of the 30 stalks can be taken at random for a mill sample. There are, therefore, 5 samples of 25 stalks on each sampling date for each variety (5 replications). The same procedure is repeated on the 1st and the 15th of each month of the harvesting season until 6 samples have been taken from the 18 sub-plots.

Average weight per stalk, Brix, sucrose, and purity of the crusher juice are obtained for each sample. Indicated yields of sugar per ton of cane are calculated by the use of appropriate reduction factors obtained in a large number of tests and Arceneaux's simplification of the Winter - Carp - Geerligs formula(2). An estimate of the number of stalks per acre can be obtained from the average yield of cane of the same varieties in adjacent fields and the aver-

age weight of the stalks sampled. This makes it possible to arrive at an estimate of the yields per-acre on each date, because the number of stalks of millable cane in the field will remain the same after October 1. Since relatively few stalks are removed from each plot on each date, competition for light, moisture and nutrients will not differ greatly from that of an undisturbed field, and any change in stalk weight will be comparable with that of a normal population of sugarcane stalks during the harvest season.

From 1953 to 1956, 3 varieties were included in the test each year. These were C. P. 44-101, C. P. 48-103, and N. Co. 310. The essential information, such as average indicated yields of sugar per ton of ca average stalk weight, and estima yields of cane per acre, based yields of adjacent fields, is tabula in tables 1 and 2.

## Results

An analysis of variance of results shows that differences stalk weights, calculated yields cane per acre, indicated yields sugar per ton of cane and sugar acre between dates, years, and va eties, were statistically significa Interaction of variety x dates v not statistically significant for st weight and yield of cane indicat that the 3 varieties behaved alike each date, but the interaction val for variety x date of sampling w highly significant for indicated yie

**Table 1. Average weight per stalk in pounds for 3 varieties on different harvest dat at Houma, Louisiana, 1953-1956**

| Variety and Year | | Date of Sampling | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | October | | November | | December | | |
| | | 1 | 15 | 1 | 15 | 1 | 10 | Averag |
| | | pounds | pounds | pounds | pounds | pounds | pounds | poun |
| C. P. 44-101 | 1953 | 2.33 | 2.33 | 2.56 | 2.71 | 2.68 | 3.02 | 2.6 |
| | 1954 | 1.83 | 2.09 | 2.06 | 2.21 | 2.09 | 2.36 | 2.1 |
| | 1955 | 1.91 | 2.21 | 2.23 | 2.80 | 2.37 | 2.12 | 2.2 |
| | 1956 | 2.22 | 2.29 | 2.43 | 2.33 | 2.38 | 2.33 | 2.3 |
| Average | | 2.07 | 2.23 | 2.32 | 2.51 | 2.38 | 2.45 | 2.3 |
| C. P. 48-103 | 1953 | 2.27 | 2.23 | 2.26 | 2.51 | 2.38 | 2.50 | 2.3 |
| | 1954 | 1.78 | 2.10 | 2.07 | 2.27 | 2.25 | 2.27 | 2.1 |
| | 1955 | 2.15 | 2.32 | 2.42 | 3.14 | 2.48 | 2.49 | 2.5 |
| | 1956 | 2.16 | 2.15 | 2.30 | 2.39 | 2.27 | 2.19 | 2.2 |
| Average | | 2.09 | 2.20 | 2.26 | 2.58 | 2.34 | 2.36 | 2.3 |
| N. Co. 310 | 1953 | 2.24 | 2.30 | 2.38 | 2.49 | 2.32 | 2.50 | 2.3 |
| | 1954 | 1.73 | 1.83 | 2.02 | 1.99 | 1.98 | 2.18 | 1.9 |
| | 1955 | 1.76 | 2.10 | 1.98 | 2.55 | 2.22 | 2.17 | 2.1 |
| | 1956 | 1.93 | 2.11 | 2.02 | 2.24 | 2.14 | 2.06 | 2.0 |
| Average | | 1.91 | 2.08 | 2.10 | 2.32 | 2.16 | 2.23 | 2.1 |
| Average | | 2.02 | 2.17 | 2.23 | 2.47 | 2.29 | 2.35 | 2.2 |
| Percent of Mean | | 90 | 96 | 99 | 110 | 102 | 104 | 100 |

| | .05 | .01 |
|---|---|---|
| L.S.D.: | | |
| Between dates, all varieties, all years | .07 | .09 |
| Between dates, 1 variety, all years | .12 | .16 |
| Between varieties, all dates, all years | .06 | .07 |

**Table 2. Calculated yields of cane per acre and indicated yields of sugar per ton of cane and per acre for 3 varieties at Houma, Louisiana, 1953-1956**

| r and Date of Harvest | Calculated yields of cane per acre | | | | Indicated yields of 96° sugar per ton of cane | | | | Indicated yields of 96° sugar per acre | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | C.P. 44-101 | C.P. 48-103 | N.Co. 310 | Average* | C.P. 44-101 | C.P. 48-103 | N.Co. 310 | Average* | C.P. 44-101 | C.P. 48-103 | N.Co. 310 | Average |
| 3: | tons | tons | tons | tons | pounds | pounds | pounds | pounds | pounds | pounds | pounds | pounds |
| October 1 | 25.1 | 24.0 | 28.9 | 26.0 | 152.9 | 189.2 | 144.6 | 161.0 | 3838 | 4541 | 4179 | 4186 |
| 15 | 25.1 | 23.6 | 29.6 | 26.1 | 165.8 | 207.0 | 158.0 | 175.3 | 4162 | 4885 | 4677 | 4575 |
| November 1 | 27.6 | 23.9 | 30.7 | 27.4 | 186.0 | 234.3 | 193.0 | 202.7 | 5134 | 5600 | 5925 | 5553 |
| 15 | 29.2 | 26.5 | 32.1 | 29.3 | 182.7 | 231.2 | 201.6 | 204.0 | 5335 | 6127 | 6471 | 5978 |
| December 1 | 28.9 | 25.1 | 29.9 | 28.0 | 205.4 | 252.7 | 218.9 | 224.1 | 5936 | 6343 | 6545 | 6275 |
| 10 | 32.5 | 26.4 | 32.2 | 30.4 | 214.1 | 255.9 | 217.4 | 227.1 | 6958 | 6756 | 7000 | 6905 |
| 4: | | | | | | | | | | | | |
| October 1 | 27.5 | 22.8 | 29.4 | 26.6 | 139.2 | 187.1 | 132.0 | 150.1 | 3828 | 4266 | 3881 | 3992 |
| 15 | 31.3 | 26.9 | 31.1 | 29.8 | 155.9 | 213.9 | 149.4 | 170.9 | 4880 | 5754 | 4646 | 5093 |
| November 1 | 30.9 | 26.5 | 34.3 | 30.6 | 185.2 | 228.0 | 163.3 | 189.2 | 5723 | 6042 | 5601 | 5789 |
| 15 | 33.1 | 29.1 | 33.8 | 32.0 | 194.4 | 240.9 | 185.3 | 199.0 | 6435 | 7010 | 6263 | 6569 |
| December 1 | 31.3 | 28.8 | 33.1 | 31.1 | 219.3 | 263.3 | 212.6 | 230.3 | 6864 | 7583 | 7037 | 7161 |
| 10 | 35.4 | 29.1 | 37.0 | 33.8 | 227.5 | 269.5 | 225.0 | 238.8 | 8053 | 7842 | 8325 | 8073 |
| 5: | | | | | | | | | | | | |
| October 1 | 23.6 | 21.5 | 25.2 | 23.4 | 108.9 | 164.9 | 97.6 | 122.1 | 2570 | 3545 | 2460 | 2858 |
| 15 | 27.3 | 23.1 | 30.1 | 26.8 | 129.3 | 195.2 | 120.4 | 145.1 | 3530 | 4509 | 3624 | 3888 |
| November 1 | 27.5 | 24.1 | 28.4 | 26.7 | 169.6 | 212.7 | 154.3 | 176.9 | 4664 | 5126 | 4382 | 4724 |
| 15 | 34.6 | 31.3 | 36.6 | 34.2 | 189.7 | 238.4 | 175.0 | 199.1 | 6564 | 7462 | 6405 | 6810 |
| December 1 | 29.3 | 24.7 | 31.8 | 28.6 | 206.9 | 260.2 | 209.6 | 223.3 | 6062 | 6427 | 6665 | 6385 |
| 10 | 26.2 | 24.8 | 31.1 | 27.4 | 213.8 | 262.9 | 204.2 | 224.7 | 5602 | 6520 | 6351 | 6158 |
| 56: | | | | | | | | | | | | |
| October 1 | 26.7 | 24.0 | 28.3 | 26.3 | 140.0 | 184.0 | 137.1 | 152.5 | 3738 | 4416 | 3880 | 4011 |
| 15 | 27.5 | 23.9 | 31.0 | 27.5 | 163.4 | 203.1 | 159.5 | 173.2 | 4493 | 4854 | 4944 | 4764 |
| November 1 | 29.2 | 25.6 | 29.7 | 28.2 | 172.2 | 225.9 | 191.0 | 194.9 | 5028 | 5783 | 5673 | 5495 |
| 15 | 26.0 | 26.6 | 32.9 | 29.2 | 198.9 | 235.1 | 214.8 | 215.7 | 5569 | 6254 | 7067 | 6297 |
| December 1 | 28.6 | 25.3 | 31.4 | 28.4 | 200.4 | 239.5 | 220.8 | 219.8 | 5731 | 6059 | 6933 | 6241 |
| 10 | 27.7 | 24.4 | 30.2 | 27.4 | 210.2 | 239.9 | 219.4 | 222.7 | 5823 | 5854 | 6626 | 6101 |
| erage: | | | | | | | | | | | | |
| October 1 | 25.7 | 23.1 | 27.9 | 25.6 | 135.9 | 181.5 | 129.0 | 147.0 | 3493 | 4192 | 3600 | 3762 |
| 15 | 27.8 | 24.4 | 30.4 | 27.5 | 153.5 | 204.9 | 147.1 | 166.5 | 4266 | 5000 | 4473 | 4580 |
| November 1 | 28.8 | 25.0 | 30.8 | 28.2 | 178.4 | 225.2 | 175.2 | 191.1 | 5137 | 5637 | 5395 | 5390 |
| 15 | 31.2 | 28.4 | 33.8 | 31.2 | 191.5 | 236.4 | 193.8 | 205.5 | 5976 | 6713 | 6551 | 6413 |
| December 1 | 29.5 | 26.0 | 31.5 | 29.0 | 208.3 | 254.0 | 215.7 | 224.7 | 6148 | 6603 | 6795 | 6515 |
| 10 | 30.4 | 26.2 | 32.6 | 29.7 | 217.4 | 257.4 | 217.0 | 229.3 | 6609 | 6743 | 7075 | 6809 |

*Weighted average.

L.S.D.: (.05 level of significance)

| | Cane per acre | Sugar per ton | Sugar per acre |
|---|---|---|---|
| Between varieties, all dates all years | 0.8 tons | 2.8 lbs. | 539 lbs. |
| Between varieties, any one date | 1.8 tons | 7.8 lbs. | 1,050 lbs. |
| Between dates, all varieties, all years | 0.9 ton | 3.9 lbs. | 749 lbs. |

sugar per ton of cane and of sugar r acre indicating that some of the rieties were relatively higher in gar content early in the period.

There was a gradual increase in alk weight from October 1 until ovember 1, a very rapid increase om November 1 to November 15, id a leveling off after that date able 1). Increases in maturity, as idenced by the increasing gains in elds of sugar per ton of cane and owth of the cane itself, account for e increases in stalk weight until ovember 1, but it is difficult to ex-ain the rapid increases during the rst half of November for each of e 4 years.

The average increase in weight per stalk for the season was 0.33 pound, or approximately 16 percent of the average initial weight of the 3 varieties. This is equivalent to 4 tons per acre on a crop of 25 tons per acre in early October and is a good argument for delaying harvest as long as possible to take advantage of gains in yields of cane.

Differences in indicated yields of sugar per ton of cane during that period were even more striking than in cane yields (table 2). The 3 varieties averaged approximately 147 pounds of sugar per ton at the beginning of the season and 229 pounds at the end of the season, an increase

of 82 pounds. The average increases ranged from 76 to 88 pounds of sugar per ton of cane for C. P. 48-103 and N. Co. 310, respectively. This points to the need for appraising the varieties in planning the harvest program, to take advantage of differences in their maturity characteristics. For example, of the 2 varieties, C. P. 48-103 is more mature at the beginning of the season, but its rate of gain is relatively less than N. Co. 310, which is relatively immature at the beginning of the season. Accordingly, the grower should plan to harvest first the varieties highest in sugar early in the season but make the slowest rate of gain and then the ones that make the most rapid gain. Highest yields of sugar per acre for the entire season will be obtained by early harvesting of varieties that make the least gain in sugar per ton of cane. However, on an economic basis, it will be more profitable to adjust the order of harvest of the varieties so as to deliver a quality product throughout the season.

Yield of sugar per acre, which is the product of cane per acre and pounds of sugar per ton of cane, was much higher as the season progressed, as would be expected when both cane and sugar yields increased. Increments of increase were relatively larger at the beginning of the season than at the end of the harvest period, nevertheless each of the 3 varieties made some gain in sugar each month until the last harvest date, December 10.

## Discussion

As stated earlier, harvesting of the sugarcane crop in Louisiana presents the dilemma of choosing between the risk of subjecting the crop to damaging freezing temperatures that can be expected any time after November 15 and the desire to reap maximum benefit by permitting an immature sugarcane plant to manufacture as much sugar as possible before it is harvested. Previous research has demonstrated that varieties differ in the rate at which th accumulate sugar during the growi season (4). Studies on effect of to ping have shown that the portion the upper immature internodes th should be removed to produce certa levels of sucrose and purity vari with the variety and with t date of harvest. For example, Arc neaux (1) found that removing t upper one-third of the millable i ternodes of Co. 281 on October increased the indicated yields of su ar per ton of cane by approximate 36 percent in plant cane and 22 pe cent in first stubble, but that it w not necessary to remove any of t upper portion of the stalks after t middle of November to produce nea ly standard sucrose and purity. Oth varieties that improved in quality removing the upper one-third of t millable portion were Co. 290, C. 807, and P.O.J. 234. On the oth hand, C. P. 28-19 produced a sta dard product early in the season a did not require any adjustment topping.

Recent studies with C. P. 44-10 C. P. 48-103, and N. Co. 310 sho that Brix of the juice from the upp portion of the stalks of C. P. 48-1 was reasonably high on October but that the varieties N. Co. 310 a C. P. 44-101 were relatively imm ture in the upper portion of t stalks at that time (5). Low toppi would not be necessary with C. 48-103, but should be practiced wi the other two varieties to produce product of acceptable quality at th time. Coleman (3) found that 6 to inches of additional topping of t varieties C. P. 36-105, C. P. 44-10 and N. Co. 310 improved the quali of cane to such an extent that its i crease in value was equal to the lo in weight.

In conclusion, it can be stated th from the standpoint of effect on t succeeding stubble crop and on tot yields of cane and sugar it would preferable to delay the beginning harvest in Louisiana until much lat than the usual date, about Octob

. Progressive increases in both ne and sugar yields make it unde-rable to begin harvesting too early th resultant losses in potential elds of a crop that needs no fur-er attention and could be accumu-ing sugar. More mature cane is so advantageous to the processor no must struggle with a poorer ality product early in the season fore a sufficient amount of sugar s been stored in the stalk.

On the other hand, a sugar factory n process just so much cane during e period before freezes occur later the season and are almost certain render the crop unfit for the pro-ction of sugar or drastically reduce e amount of sugar that can be re-vered from frozen cane. The grow-who fails to harvest his crop be-re damaging freezes occur, stands lose more than the one who be-ns harvesting a little earlier, even ough he takes some loss at the be-nning of the season.

Planting a certain percentage of e acreage in early-maturing vari-es, and low topping, if necessary, produce cane that will be accept-le to the mills early in the season, pear the best solution to the prob-n in which the grower knowingly crifices some yield of cane and sug-in order to harvest all the crop fore a greater loss is sustained as result of freezing weather.

### Literature Cited


Arcenaux, George. 1935. Studies of ripening of sugarcane in Louisiana and of effect of topping upon yields of cane and sugar per acre. USDA Circ. 368, 32 pp.

2. ..... 1935. A simplified method of making theoretical sugar yield calculations in accordance with the Winter - Carp - Geerligs formula. Int. Sugar Jour. (37):264-265.
3. Coleman, R. E. 1959. Quality of harvested cane affected by trash and topping. Sugar Jour. 22(12):9-11.
4. Hebert, L. P. 1957. Comparison of indicated sugar yields of important varieties on different dates during recent years at Houma, Louisiana. The Sugar Bull. 35(12):168-171.
5. ..... 1959. Method of determining Brix with the hand refractometer in selecting sugarcane seedlings. Proc. 10th Cong. Int. Soc. Sugar Cane techn.


LOUISIANA STATE UNIV. LIBRARY

—o—

## IN WASHINGTON

(Continued from page 214)

buy sugar on the world market and sell it on the United States market at the price we have been paying Cuba. The profit could then be used to pay American claims for property seized by the Cuban government. At the same time, the loss of the United States as a customer would cost Cuba about $150 million a year."

Many, many thanks, Senator. Never has there been the slightest doubt about your interest in Louisiana sugar producers.

—o—

## *DID YOU KNOW . . . ?*

Most cane areas other than Louisiana keep cane continuously on the same land year after year.


Cane Master
THE MARK OF QUALITY

J AND L

- HARVESTERS
- LEVELERS
- CANE TRAILERS
- STUBBLE SHAVERS
- LOADERS
- CARTS
- MECHANICAL HOES
- DRAIN CLEANERS

. & L. ENGINEERING CO., INC. Jeanerette, Louisiana

The days when sugar cane borer strikes and steals a lion's share of your hard-earned profits are over. You can fight back with endrin insecticide . . . it's the end for sugar cane borer.

Endrin has been thoroughly tested and approved for control of sugar cane borer. For best results, apply endrin granules by air.

Put an end to sugar cane borer damage this season. Use endrin! It's available from your insecticide dealer. Don't delay—see him today!

**SHELL CHEMICAL CORPORATION**
AGRICULTURAL CHEMICALS DIVISION
119 South Claiborne Avenue, New Orleans 12, Louisiana

35
1
Chem.
La. State University.
University. Station
Baton Rouge, La.
LOUISIANA STATE UNIVERSITY CHEMISTRY LIBRARY (3)

THE SUGAR BULLETIN

38—No. 18 JUNE 15, 1960

ial Bulletin of the American Sugar Cane League of the U. S. A.

## WHAT YOUR LEAGUE DUES DO FOR YOU

Part of your League dues are used to pay the expenses involved in breeding, selecting, increasing and distributing new cane varieties.

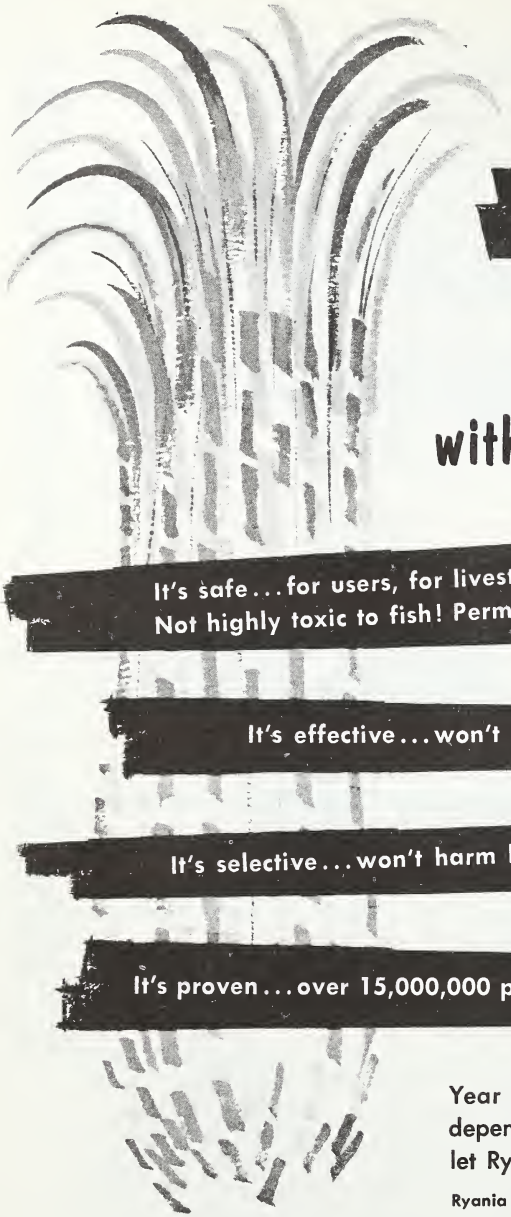
The cane varieties you grow today are the best in the world for Louisiana conditions. They have, in fact, been "tailor-made" under the auspices of the American Sugar Cane League, for use in this particular part of the world. They are the result of a project operated cooperatively by the American Sugar Cane League, the U. S. Department of Agriculture and the Louisiana Agricultural Experiment Station. Funds to finance this project have been furnished by the League and the Federal and State governments. The League helped obtain the federal and state contributions to this all important program.

Cane breeding for Louisiana is done at Canal Point, Florida, and at Baton Rouge. Several hundred thousand of the tiny cane seed (each one a separate variety) produced each year are planted in greenhouses at Houma and Baton Rouge. The resulting seedlings are later transplanted to the fields for selecting, testing, and increasing. Perhaps one in many thousands will be better than our present commercial varieties but this one makes the project worth while. C. P. 52-68, the latest variety released under the program, is meeting with great favor all over the sugar belt.

**Without new cane varieties there would be no Louisiana Sugar Industry. This one activity of the League gives every grower the opportunity to earn additional money which far exceeds the 1½ cents per ton of cane he pays in League dues.**

*Warren Harang, Jr.,*
*President*

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry



you can control

Sugar Cane Borer

right up to harvest

with Ryania!

It's safe... for users, for livestock, for wildlife!
Not highly toxic to fish! Permits use of bagasse for feed!

It's effective... won't develop resistant strains!

It's selective... won't harm beneficial insects!

It's proven... over 15,000,000 pounds used in the past 12 years!

Year after year more and more growers depend on Ryania. This year, as in the past, let Ryania protect *your* crops.

Ryania is covered by Patent Nos. 2,400,295 and 2,590,536.

**Distributed by**

**BARTLETT CHEMICALS, INCORPORATED**
New Orleans, Louisiana

**THOMPSON-HAYWARD CHEMICAL CO.**
New Orleans, Louisiana

PENICK

*Farm Chemical and Insecticide Division*

**S. B. PENICK & COMPANY • 100 CHURCH ST., NEW YORK 8 • 735 W. DIVISION ST., CHICAGO**

LOUISIANA STATE UNIVERSITY LIBRARY

THE
# SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

ilbert J. Durbin, Editor — Andrew W. Dykers, Managing Editor

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

Issued on the 1st and 15th of each month. Subscription: Member 50 cents a year. Non-Members $3.00 a year.

Washington Office, 510 Union Trust Bldg., Washington, D. C.
Josiah Ferris, Manager

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
F. M. Burley, Jr., Youngsville, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

# IN THE FIELD WITH LLOYD L. LAUDEN

*by Lloyd L. Lauden*

## CONTACT COMMITTEE MEETING
### Thursday, June 23, 1960, 9:30 A. M.

It is again time to hold the Annual U. S. D. A. Houma Sugar Station Co tact Committee meeting. Dr. E. V. Abbott, Superintendent of the Stati and Mr. Malcolm Duhe, Chairman of the League's Contact Committee, vite all cane growers to attend this meeting. The meeting will begin at 9: A. M., Thursday, June 23, 1960 at the Houma Station. Outlined below is schedule of the program:

Breeding and Seedling Work:
- Breeding work at Canal Point.....P. H. Dunckelm
- Seedling work at Houma.....R. D. Brea
  L. P. Hebe

Varieties and Agronomy:
- Report on commercial and unreleased varieties at the test fields.....R. J. Mather
  T. J. Staffo
- 1959 variety census
- Effect of time of dirting on suckering and yield.....L. P. Hebe

Entomology:
- Varietal resistance of sugarcane to the borer.....R. Math
- Insecticidal control of the borer.....S. D. Hensl
- Insect vectors of sugarcane mosaic, borer parasites and harvest time survey.....L. J. Charpent

Remarks by Dr. H. M. Tysdal, Chief, Tobacco and Sugar Crops Research Branch, Agricultural Research Service, U. S. D. A., Beltsville, Md.

Dedication of Memorial Plaque to Mr. Elliott Jones

Adjourn for barbecue lunch on station grounds

**Afternoon Session**
**1:30 P.M.**

- Fertilizer report.....L. G. Davids
- Mosaic disease situation.....E. V. Abbo
- Progress in development of harvester.....R. M. Ra
- Report on Dr. R. E. Coleman's physiology studies.....L. P. Hebe

The purpose of this meeting is to allow cane growers to hear, first har what is being done in sugar cane research. In addition growers can a questions of the research workers and make suggestions for future researc Growers will have an opportunity to visit the new seedlings plots where mo than 500,000 new varieties are being grown. This one sight alone should i terest every cane grower in Louisiana and should make the trip to Houn more than worthwhile.

Although every speaker on the program is a very important figure on t research team, it is also important to point out that two speakers on t program will have to travel great distances to address this meeting. If I H. M. Tysdal from Maryland and Mr. Preston Dunckelman from Florida c arrange to be present at this meeting, many Louisiana cane growers shou be able to do the same.

The successful future of the Louisiana sugar industry is dependent up many things, but none so important as the whole research program. Wh could be more important to cane growers than new varieties? The sar question can be asked of each phase of the research program. A good a tendance at this meeting will serve two good purposes. Growers will lea of the new developments in growing cane, and in so doing, these growers w show their appreciation for the research work being done. Mark this date the calendar now and plan to attend this meeting.

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*

The Cooley Sugar Bill, H. R. 12311, as approved by the House Agriculture Committee on June 1, 1960. The bill would extend the present Sugar Act to December 31, 1961, unchanged, except for an amendment which would permit the Secretary of Agriculture to reduce the quota of any area for any calendar year by the amount of its deficit.

The Committee rejected the Administration's request for a four year extension and authorization for the President to reduce the quota for foreign countries, other than the Philippines, when he deems it in the National interest.

The vote in the Committee was very much along Party lines. All of the Republicans and one Democrat on the Committee voted against the Report, but the Republicans themselves had divided opinions, and three Minority Reports were filed by the R. O. P. members. The principal Minority Report filed by eleven Republican members of the Committee, took exception to the Cooley Bill because it did not give the President authority to adjust foreign quotas when Congress is not in session. Additional minority views were held by Representative Catherine May, of Washington, because the proposed Bill did not increase quotas for domestic sugar areas, particularly sugar beet areas. The third minority view was presented by Representative Page Belcher, of Oklahoma, because the Bill did not grant the President full authority to adjust quotas for the entire period of the Act.

The Report to accompany HR 12311 was filed June 6th, and the Rules Committee is expected to authorize a "Closed Rule" which would prevent amendments from being made when the Bill goes to the House floor for debate. The Republican members of the Agriculture Committee, headed by Charles B. Hoeven, of Iowa, say they will appear before the Rules Committee and oppose a Closed Rule.

Representative Hoeven has indicated that he would accept a modified

(Continued on Page 235)

## *In This Issue*


What Your League Dues Do For You ..... Cover
In The Field With Lloyd L. Lauden ..... 224
**Contact Committee Meeting June 23rd**
In Washington With Joe Ferris ..... 225
**Sugar Legislation**
Processing Of New Commercial And Unreleased Sugarcanes: Results Of Clarification Experiments During The 1959 Season ..... 226
A Plan For Making Available To Farmers Mosaic-Rouged Seed Cane ..... 234

# PROCESSING OF NEW COMMERCIAL AND UNRELEASED SUGARCANES RESULTS OF CLARIFICATION EXPERIMENTS DURING THE 1959 SEASON

*By W. F. Guilbeau, E. E. Coll, J. J. Friloux, and L. F. Martin, Southern Utilization Research and Development Division,[1] New Orleans, Louisiana*

Pilot plant milling and clarification experiments with samples of cane from the 1959 crop completed a decade of research on the processing of new canes introduced during that period in Louisiana. Plant cane of CP 51/21 and CP 53/1, not yet released for commercial cultivation, were included in the experiments last season with additional tests of both plant and stubble cane samples of the important new varieties, CP 52/68 and N.Co. 310. Ratings relative to the results of processing the standard, CP 44/101, provide the information required by the Contact Committee to determine whether the unreleased canes are suitable for commercial processing, and by growers and processors for estimating the overall advantages of increasing plantings of the new commercial canes. The canes, with the exception of unreleased variety CP 53/1, were grown at St. Gabriel Plantation and samples were delivered to the Audubon Mill by the American Sugar Cane League as in previous years. This year, in addition to furnishing the cane, the League provided for milling of the 28 samples tested by arrangement with Louisiana State University. The juices were used for the experiments conducted by SURDD personnel on clarification in the small, 50-gallon per hour, continuous processing system at the Audubon Factory, employing standard procedures that have been described in previous reports(1).

## Growing and Harvesting Condtions

Weather during the growing season was favorable at St. Gabriel, as it was throughout the sugarcane belt, and stands of the new and standard canes there were excellent when harvesting was begun. Subsequent weather conditions experienced as harvesting progressed are recorded i Figure 1, together with the dates harvesting of each of the pairs samples of the canes used in the e periments. Very good conditions p vailed until November 5, by whi time all of the stubble cane samp had been harvested. Plant canes we affected by the succession of freez from which the entire Louisiana cr suffered, the earliest of which c curred at St. Gabriel on November Minimum temperatures of 32°F. below were reached on 11 subseque days before the last pair of samp was harvested on December 7. T maximum temperatures fortunate remained low during this time a none of the cane was damaged s verely, although some progressive d terioration did occur.

The unreleased variety, CP 53/ has been planted at St. Gabriel that both stubble and plant grow of this cane will be available fro that source next year, but prelim nary tests were made with two sa ples of plant cane of the variety o tained from Smithfield Plantatio Comparison of the results of clari cation with those obtained in expe ments with the standard CP 44/1 from St. Gabriel are tentative, as t soil as well as the growing and ha vesting weather conditions differ between the two locations. This ca was estimated to contain somewh more trash than most of the oth samples used, but its condition othe wise was comparable to that of t plant cane of other varieties receive during the latter part of Novembe

## Juice Purities

Apparant purities of the dilu juices of stubble canes harveste early in the season were low, and pu ities did not increase with advan of the season and the harvesting

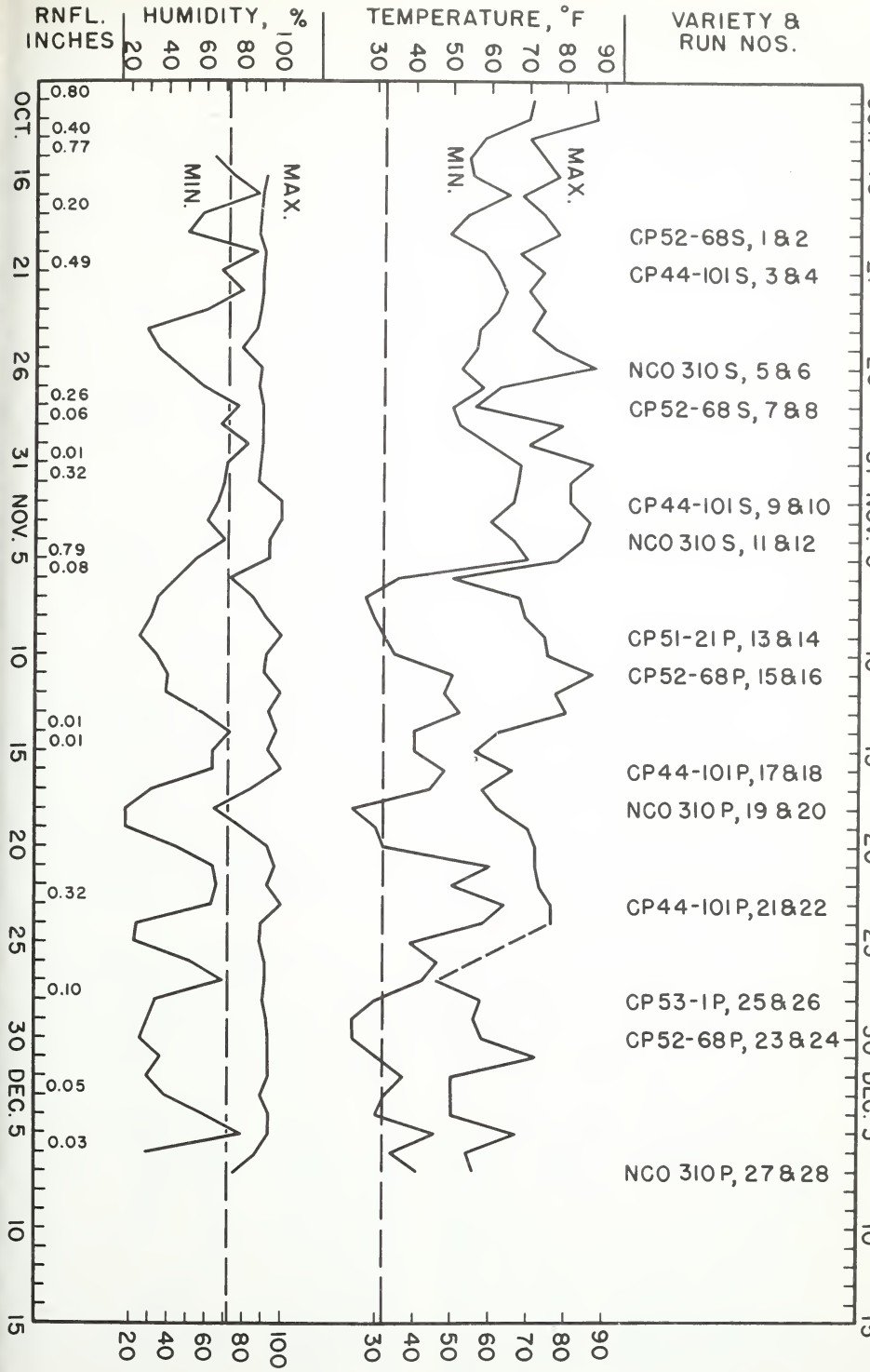


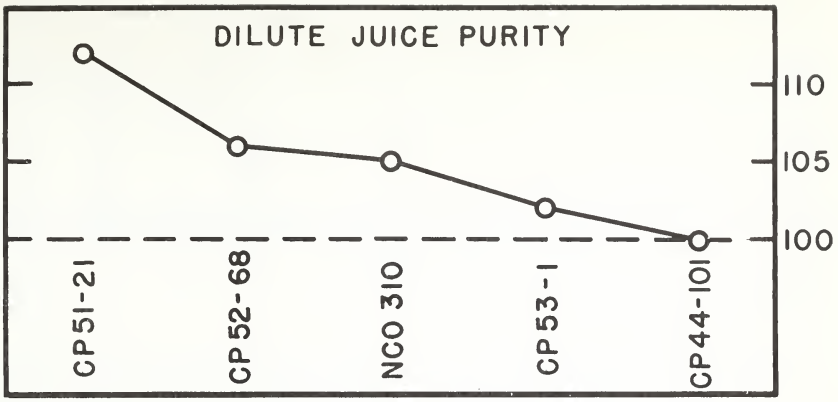

FIG. 1. WEATHER CONDITIONS AND HARVESTING DATES FOR 1959

TABLE I 1959 VARIETY PROCESSING EXPERIMENTS -- CLARIFICATION CONDITIONS AND PROCESSING RESULTS

| Date Milled | Cane Variety 1/ | Run No. | Trash, % of Cane | Dilute Juice pH | Limed Juice pH | Defecated Juice pH | Defecated Juice Clarity 2/ | Apparent Purities of Juice Dilute | Apparent Purities of Juice Defecated |
|---|---|---|---|---|---|---|---|---|---|
| 10/22 | CP 44-101S | 3 | 8.0 | 5.55 | 7.35 | 6.65 | 40 | 67.4 | 71.9 |
| 10/23 | " | 4 | 9.0 | 5.55 | 7.35 | 6.65 | 34 | 66.9 | 71.2 |
| 11/3 | " | 9 | 5.5 | 5.55 | 7.4 | 6.65 | 43 | 72.8 | 74.4 |
| 11/4 | " | 10 | 5.0 | 5.50 | 7.35 | 6.60 | 38 | 73.2 | 75.2 |
| | | Average | 6.9 | 5.51 | 7.36 | 6.64 | 39 | 70.1 | 73.2 |
| 10/20 | CP 52-68S | 1 | 6.0 | 5.65 | 7.4 | 6.6 | 33 | 73.6 | 77.2 |
| 10/21 | " | 2 | 5.0 | 5.6 | 7.4 | 6.65 | 30 | 72.4 | 75.3 |
| 10/29 | " | 7 | 6.0 | 5.55 | 7.4 | 6.65 | 25 | 74.5 | 76.6 |
| 10/30 | " | 8 | 6.0 | 5.55 | 7.35 | 6.65 | 30 | 77.2 | 78.7 |
| | | Average | 5.8 | 5.59 | 7.39 | 6.64 | 30 | 74.4 | 77.0 |
| 10/27 | N.Co. 310S | 5 | 4.0 | 5.55 | 7.4 | 6.65 | 29 | 73.5 | 75.2 |
| 10/28 | " | 6 | 4.5 | 5.55 | 7.35 | 6.65 | 30 | 71.8 | 73.6 |
| 11/5 | " | 11 | 6.0 | 5.55 | 7.35 | 6.65 | 23 | 73.6 | 76.1 |
| 11/6 | " | 12 | 7.0 | 5.55 | 7.35 | 6.65 | 39 | 76.7 | 80.1 |
| | | Average | 5.4 | 5.55 | 7.39 | 6.65 | 30 | 73.9 | 76.2 |
| 11/17 | CP 44-101P | 17 | 5.0 | 5.6 | 7.45 | 6.65 | 38 | 74.9 | 76.4 |
| 11/18 | " | 18 | 3.5 | 5.5 | 7.4 | 6.65 | 38 | 73.3 | 75.2 |
| 11/24 | " | 21 | 5.0 | 5.6 | 7.3 | 6.75 | 24 | 67.7 | 70.6 |
| 11/25 | " | 22 | 3.0 | 5.6 | 7.35 | 6.75 | 27 | 69.3 | 72.2 |
| | | Average | 4.1 | 5.59 | 7.38 | 6.70 | 32 | 71.3 | 73.6 |
| 11/10 | CP 51-21P | 13 | 6.0 | 5.7 | 7.35 | 6.7 | 16 | 79.4 | 80.3 |
| 11/11 | " | 14 | 8.0 | 5.65 | 7.4 | 6.65 | 20 | 79.2 | 81.5 |
| | | Average | 7.0 | 5.68 | 7.38 | 6.68 | 18 | 79.3 | 80.9 |
| 11/12 | CP 52-68P | 15 | 5.0 | 5.65 | 7.35 | 6.7 | 35 | 77.7 | 79.5 |
| 11/13 | " | 16 | 6.0 | 5.6 | 7.35 | 6.7 | 34 | 77.6 | 79.7 |
| 12/1 | " | 23 | 6.0 | 5.3 | 7.4 | 6.75 | 43 | 73.1 | 75.4 |
| 12/2 | " | 24 | 4.0 | 5.4 | 7.35 | 6.7 | 37 | 72.1 | 73.3 |
| | | Average | 5.3 | 5.49 | 7.39 | 6.71 | 37 | 75.1 | 77.0 |
| 12/3 | CP 53-1P 3/ | 25 | 8.0 | 5.65 | 7.4 | 6.65 | 30 | 71.4 | 72.8 |
| 12/4 | " 3/ | 26 | 6.0 | 5.7 | 7.35 | 6.65 | 35 | 72.5 | 74.5 |
| | | Average | 7.0 | 5.68 | 7.38 | 6.65 | 32 | 72.0 | 73.6 |
| 11/19 | N.Co. 310P | 19 | 5.0 | 5.5 | 7.4 | 6.65 | 30 | 76.7 | 78.8 |
| 11/20 | " | 20 | 4.0 | 5.5 | 7.4 | 6.65 | 31 | 75.2 | 77.2 |
| 12/8 | " | 27 | 6.0 | 5.5 | 7.35 | 6.70 | 41 | 74.7 | 76.2 |
| 12/9 | " | 28 | 3.0 | 5.35 | 7.35 | 6.75 | 35 | 71.2 | 71.9 |
| | | Average | 4.5 | 5.46 | 7.38 | 6.69 | 34 | 74.4 | 76.0 |

1/ S- 1st year stubble cane; P-Plant cane

2/ Adjusted to 14 Brix




nt canes as in previous crops when orable conditions prevailed during harvests. The last two columns Table I are the purities determined individual experiments for dilute es and for defecated juices which owed the same trend, because the e in purity resulting from clarifi- ion is of approximately the same er in all of the experiments. An rage purity slightly above 80% s obtained only for the two plant e samples of CP 51/21, but this e has a high fiber content and rity of the defecated juices was y low. Juices of all of the new es were of higher purity than the ndard CP 44/101. Comparison on ercentage basis of the average re- ts for both stubble and plant cane s is presented in the top chart of ure 2.

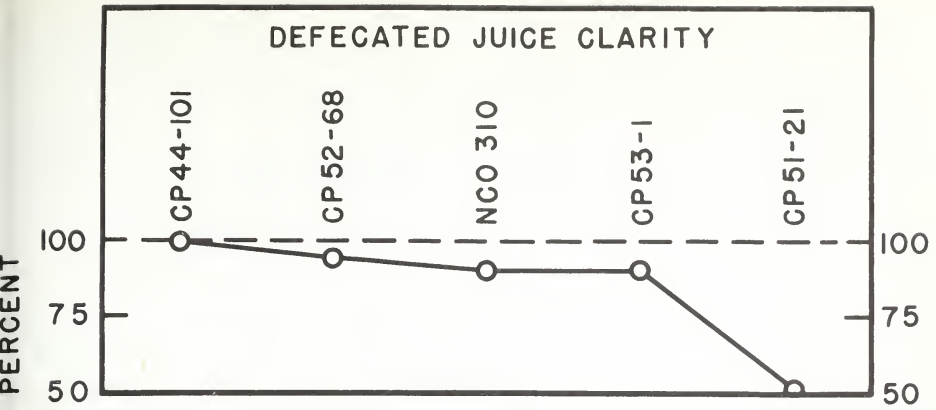
## Quantities of Clarification Precipitate

The most important quantity de- mined in the experiments is the ght of whole, wet mud discharged m the clarifier when the juice is arated continuously at the rate approximately 50 gallons per r. This is related inversely to rate at which the juice can be cessed commercially with a given ifier capacity, slower rates being essary when larger amounts of d must be withdrawn and greater mes of filtrate recycled in the cess. The increased cost of grind- and processing at a reduced rate be calculated, in addition to which the loss of sugar by inversion will be greater during the longer clarification retention time. The weights of mud per ton of cane separated in individual experiments are given in Table II, in which they are averaged for each kind of cane of each of the varieties tested. This table also presents data on the actual weights of dry solids in the mud, and the weights of solids adjusted by deducting the variable amounts of excess soil precipitated with the mud in clarification. The average results of experiments with both plant and stubble growth of each cane were used for comparison with the standard on a percentage basis in the bottom chart of Figure 2. The stubble canes, all harvested before the first freeze, yielded consistently small quantities of mud in tests of both the new canes and of the standard. All of the plant canes were harvested after the crop had been affected by freezing weather, and these samples produced consistently large amounts of mud, with the exception of the two samples of plant cane of CP 53/1 from Smithfield Plantation. The average results place N.Co. 310 as superior to standard, while CP 52/68 is slightly inferior to the standard in this season's tests. The large quantity of mud obtained in clarifying the two samples of plant cane of CP 51/21 place it as markedly inferior, with a rating of only 83% of standard; this agrees with results of the tests of plant cane of this variety obtained

TABLE II. 1959 VARIETY PROCESSING EXPERIMENTS -- LIME REQUIREMENTS AND MUD EVALUATIONS

| Cane Variety[1] | Run No. | Lime Required, Lbs./T. Cane | Dry Solids, % of Mud Weight | Mud Wt., Lbs./T. Cane Dry Solids Wet | Actual | Adjusted[2] | Dry Solids Analyses, Weight % Mineral | Organic |
|---|---|---|---|---|---|---|---|---|
| CP 44-101S | 3 | 1.64 | 9.85 | 129 | 12.7 | 6.9 | 63.0 | 37.0 |
| " | 4 | 1.96 | 10.43 | 142 | 14.8 | 7.4 | 65.0 | 35.0 |
| " | 9 | 1.78 | 7.79 | 122 | 9.5 | 7.6 | 48.8 | 51.2 |
| " | 10 | 1.81 | 7.84 | 136 | 10.7 | 7.3 | 50.1 | 49.9 |
| " | Average | 1.80 | 8.98 | 132 | 11.9 | 7.3 | 56.7 | 43.3 |
| CP 52-68S | 1 | 1.68 | 9.78 | 146 | 14.3 | 7.6 | 62.6 | 37.4 |
| " | 2 | 1.60 | 9.82 | 140 | 13.7 | 7.4 | 62.2 | 37.8 |
| " | 7 | 1.56 | 6.94 | 105 | 7.2 | 6.5 | 41.4 | 58.6 |
| " | 8 | 1.98 | 5.90 | 141 | 8.3 | 7.7 | 39.8 | 60.2 |
| | Average | 1.70 | 8.09 | 133 | 10.8 | 7.3 | 51.5 | 48.5 |
| N. Co. 310S | 5 | 1.44 | 8.45 | 95 | 8.1 | 7.1 | 40.1 | 59.9 |
| " | 6 | 1.65 | 8.44 | 110 | 9.2 | 7.8 | 40.1 | 59.9 |
| " | 11 | 1.59 | 8.73 | 116 | 10.2 | 8.2 | 42.7 | 57.3 |
| " | 12 | 2.06 | 6.60 | 155 | 10.3 | 9.0 | 40.2 | 59.8 |
| | Average | 1.68 | 8.05 | 119 | 9.5 | 8.0 | 40.8 | 59.2 |
| CP 44-101P | 17 | 2.31 | 4.61 | 173 | 8.0 | 7.7 | 44.3 | 55.7 |
| " | 18 | 2.09 | 5.26 | 159 | 8.4 | 7.9 | 46.4 | 53.6 |
| " | 21 | 2.57 | 6.60 | 168 | 11.1 | 8.1 | 55.0 | 45.0 |
| " | 22 | 2.29 | 7.36 | 155 | 11.4 | 8.4 | 51.9 | 48.1 |
| | Average | 2.32 | 5.95 | 164 | 9.7 | 8.0 | 49.4 | 50.6 |
| CP 51-21P | 13 | 1.62 | 6.04 | 194 | 11.7 | 11.3 | 40.7 | 59.3 |
| " | 14 | 1.91 | 5.30 | 161 | 8.5 | 8.1 | 36.0 | 64.0 |
| | Average | 1.76 | 5.67 | 178 | 10.1 | 9.7 | 38.4 | 61.6 |
| CP 52-68P | 15 | 1.94 | 4.88 | 159 | 7.7 | 7.5 | 40.1 | 59.9 |
| " | 16 | 2.04 | 4.91 | 164 | 8.1 | 7.8 | 37.4 | 62.6 |
| " | 23 | 2.67 | 4.75 | 216 | 10.2 | 9.7 | 37.0 | 63.0 |
| " | 24 | 2.59 | 5.21 | 194 | 10.1 | 9.5 | 35.8 | 64.2 |
| | Average | 2.31 | 4.94 | 183 | 9.0 | 8.6 | 37.6 | 62.4 |
| CP 53-1P | 25 | 1.21 | 7.23 | 124 | 9.0 | 8.2 | 30.5 | 69.5 |
| " | 26 | 1.13 | 7.76 | 120 | 9.3 | 8.0 | 33.5 | 66.5 |
| | Average | 1.17 | 7.50 | 122 | 9.2 | 8.1 | 32.0 | 68.0 |
| N.Co. 310P | 19 | 1.76 | 6.82 | 125 | 8.5 | 8.1 | 34.8 | 65.2 |
| " | 20 | 1.74 | 6.61 | 107 | 7.1 | 6.7 | 35.9 | 64.1 |
| " | 27 | 2.31 | 4.92 | 189 | 9.3 | 9.3 | 30.3 | 69.7 |
| " | 28 | 2.19 | 5.82 | 164 | 9.6 | 9.0 | 32.3 | 67.7 |
| | Average | 2.00 | 6.04 | 146 | 8.7 | 8.3 | 33.3 | 66.7 |

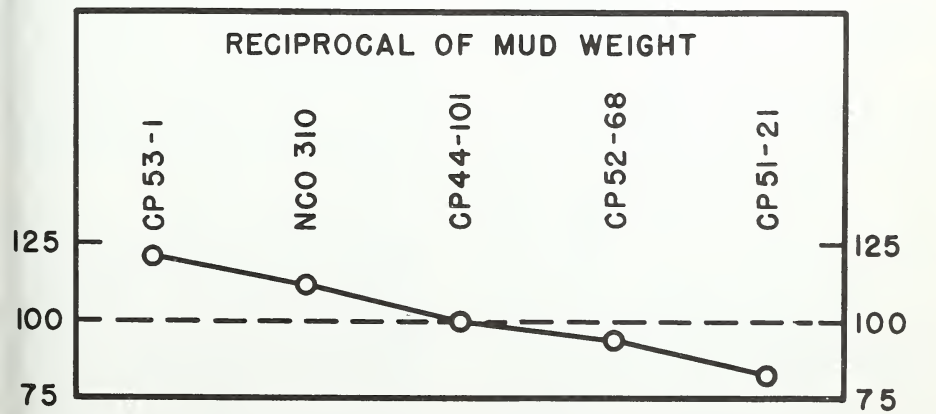
1/ S - 1st year stubble cane; P - Plant cane.




om Hope Plantation in 1958. Re-
ts for unreleased variety CP 53/1
e preliminary, being the average
only two tests of plant cane, but
dicate that this cane should prove
perior to the standard in the rate
which it can be precessed.

### Clarities

Clarities of the defecated juices
om individual experiments, by Lux-
eter measurement, are in Table I,
gether with the averages for stub-
and for plant cane tests of each
riety. Both the individual and the
erage clarities varied less than in
periments during previous seasons,
d the average values were fairly
gh for all of the canes except CP
/21. The low average value of
% Luximeter clarity obtained in
e two experiments with this unre-
sed cane agree with values of 18%
for stubble cane and 14% for plant cane processed in 1958, confirming the unsuitability for commercial processing of CP 51/21. The large quantities of mud produced in experiments with plant cane of this variety indicate a reduced rate of processing that could not be compensated for, even by high clarities averaging above 45% Luximeter. Percentage ratings based upon the average of both stubble and plant tests, given in the middle chart of Figure 2, place the two new commercial canes and unreleased variety CP 53/1 as somewhat inferior to the standard in clarity of the defecated juices processed this season. The results are essentially the same as those obtained for clarity in experiments with the commercial canes, N.Co. 310 and CP 52/68, from the 1958 crop.




IG. 2, 1959 VARIETY COMPARISONS (CP44-101 AS STANDARD)

TABLE III.
Clarified Juice Purities, Mud Weights, and Clarities from Pilot Plant Clarification of New Canes and Comparison with Standard CP 44/101.
Averages of all comparable tests of both plant and stubble cane.

| Variety | Purity | | Clarity | | Mud Weight | |
|---|---|---|---|---|---|---|
| | Percent | Percent of Std. | Percent Trans. | Percent of Std. | lb./T. cane | Percent 1/ of Std. |
| | | 44 Tests, 1952-1959, inclusive | | | | |
| CP 44/101 | 75.1 | 100 | 43 | 100 | 145 | 100 |
| N.Co. 310 | 78.5 | 104 | 36 | 84 | 134 | 108 |
| | | 28 Tests, 1952-1957, inclusive | | | | |
| CP 44/101 | 75.5 | 100 | 44 | 100 | 143 | 100 |
| CP 47/193 | 77.9 | 103 | 48 | 109 | 153 | 93 |
| CP 48/103 | 82.3 | 109 | 43 | 98 | 123 | 116 |
| | | 20 Tests, 1957-1959, inclusive | | | | |
| CP 44/101 | 72.7 | 100 | 40 | 100 | 141 | 100 |
| CP 52/68 | 77.3 | 106 | 32 | 80 | 130 | 109 |

1/ Reciprocal of mud weights.

## Average Results of All Tests of Four New Canes

Experiments with samples from several successive crops provide average results that are more reliable for comparison of the canes than data obtained during a single grinding season. The important new canes that Louisiana mills will be grinding in increasing quantities during future seasons have been milled and processed experimentally during at least three to as many as eight successive crops. The newest variety, CP 52/68, was used for 20 experiments; N.Co. 310 was tested in 44 individual experiments, with as many comparable tests of CP 44/101. Results that may be expected in clarifying juices of these canes in the factories can be related to those currently obtained in processing the predominant variety, CP 44/101, by the average values of determinations of the principal process variables a sembled in Table III. The puriti recorded are those of the clarifi juices that are a measure of the jui quality attainable by the standa liming procedure, rather than ra juice purities that are representati of the quality obtained in millin Percentage ratings on the importa processing factors of purity, clari and quantity of clarification preci tate are relative to the data obtain in comparable experiments with C 44/101.

The major effect of handli larger or smaller weights of mud a volumes of recycled filtrate upon t rate and efficiency of milling a clarification can be calculated, a this factor undoubtedly has great weight than the others for evaluati of a new cane for processing. T increased amount of sugar that m be obtained from clarified juice

gher purity also can be calculated, the impurities contributing to low ice clarity do not prevent effective haustion of molasses and limit the covery of sugar. Pilot plant exrimentation on the relation of sugre recovery and quality to clarity of e juice will be necessary to deterine the weight that should be asgned to the clarity factor in rating e canes. A reasonable preliminary sumption is that the weight of mud as important as purity and clarity ken together; that is, the percentge ratings based on the amount of ud have a weight of 2, and the perntage ratings for purity and clari have weights of 1 each. Combing the percentages of Table III, with is arbitrary assignment of impornce to each of the factors deterined by the experiments, places ree of the new canes almost exactequal to the standard CP 44/101 processing quality. The combined rcentages are found to be, for N. o. 310, 101%; for CP 47/193, 9.5%; and for CP 52/68, 101%. he first two canes are distinctly perior in producing less mud hich, with the greater importance ssigned to the increased rate of rocessing which this makes posble, compensates for the poor clary of the juices obtained in clarifiation. The superior clarity of juices roduced from CP 47/193 compenates for the poor rating of this cane the larger quantities of mud that has produced consistently in the ilot plant experiments. Similar calulations for the percentage ratings f CP 48/103 place it as the only ne of the new canes that is markedsuperior to CP 44/101 for processg, with a combined rating of alost 110%. It is very much better an any of the canes tested in proucing small quantities of mud to nsure processing at maximum mill nd factory capacities, while yielding ice of clarity almost equal to that f the standard. This early maturing ariety also yielded clarified juices f the highest average purity of any used in the experiments. Wherever it can be grown with satisfactory yields, it will produce more recoverable sugar per acre, and contribute to increased processing efficiency and profit.


## Acknowledgments

The American Sugar Cane League made a direct contribution to defray the labor costs of grinding the samples of cane at the Audubon Mill, in addition to providing for production and delivery of the canes from St. Gabriel Plantation as in past seasons. We are sincerely appreciative of their increased financial cooperation, that is vital for continuation of the research. We are indebted particularly to the Industrial Committee for counsel and assistance in planning the experiments, and to Mr. Lloyd L. Lauden for his untiring efforts in supervising planting and production of canes and ensuring delivery as scheduled for our use. The genuine interest and care of the staff and personnel of St. Gabriel Plantation again were an essential contribution to the success of the program. We and our cooperators are thankful to Milliken & Farwell, Inc., for generously supplying the samples of C.P. 53/1 from Smithfield Plantation. We are also grateful to Prof. A. G. Keller and Mr. C. W. Stewart for carrying out the milling tests that produced juices used in the experiment.


[1] One of the Divisions of the Agricultural Research Service, U. S. Department of Agriculture.

## References


(1) Guilbeau, W. F., Coll, E. E., and Martin, L. F. Sugar Bull. 37 (21): 274-283 (Aug. 1, 1959).


———o———

***DID YOU KNOW . . . ?***

Like flu, mosaic disease is caused by a virus.

***DID YOU KNOW . . . ?***

Mosaic disease is transmitted from one cane plant to another by insects.

***DID YOU KNOW . . . ?***

A pair of cane slings cost about 24 dollars.

## A PLAN FOR MAKING AVAILABLE TO FARMERS MOSAIC-ROUGED SEED CANE

*By L. M. Shaffer*

A committee composed of pathologists from the Louisiana Agricultural Experiment Station and the U.S.D.A. Sugarcane Station at Houma, Louisiana, together with representatives from the American Sugar Cane League, selected the following growers who agreed to cooperate in a program of producing Mosaic-rogued seed cane for sale to other growers: Little Texas (N.Co. 310); Lula (C.P. 52-68 and C.P. 44-101); F. A. Graugnard & Sons (C.P. 52-68, C.P. 44-101, N.Co. 310); and Howard Viator, Adeline (N.Co. 310 and C.P. 44-101). Growers were selected in these areas because farmers in the areas expressed an interest in purchasing Mosaic-rogued cane for planting seed plots.

The committee determined, by a careful inspection, that Mosaic infection was less than one per cent in all cane selected for roguing. The percentage of ratoon stunting disease was also determined in each field selected for Mosaic disease control; every effort being made to select fields having the lowest possible infection of ratoon stunting disease.

The plan is to rogue out and destroy Mosaic plants in all plots at intervals of two weeks, or more often if necessary, during May and June, or until the cane becomes too big for further roguing. This will be done under supervision of certain committee members. A record will be made of the percentage of Mosaic found at the last roguing, and these diseased plants will also be rogued out, and this record will be furnished the grower and the purchaser of the cane for seed purposes. It is proposed also that a survey will be made in the fall to determine the percentage of ratoon stunting disease in each plot of cane. This record also will be given to the grower and to the buyer of the seed cane.

It is proposed that applications for Mosaic-rogued seed cane will be handled by county agents.

***DID YOU KNOW . . . ?***

Shaving of sugar cane is not recommended as a general practice.

***DID YOU KNOW . . . ?***

Several persons are trying to d velop quarter drain machines.


Cane Master
THE MARK OF QUALITY

J AND L

- HARVESTERS
- LEVELERS
- CANE TRAILERS
- STUBBLE SHAVERS
- LOADERS
- CARTS
- MECHANICAL HOES
- DRAIN CLEANERS

J. &. L. ENGINEERING CO., INC. Jeanerette, Louisianc

## WASHINGTON

(Continued from Page 225)

le which would permit one amend-ent, namely: a part-time Presiden-l authority to adjust quotas when e Bill goes to the floor. As of now, ne 9th, it looks like the members the Rules Committee, as well as e Committee on Agriculture, will te along party lines for a Closed at least a modified Rule.

The report, prepared by Mr. Cooley d members of his staff, in the inion of many veterans of past gar legislative campaigns, contains far the best explanation ever of-red of the difference between the rld market price and the domestic ice of sugar.

House action on the Bill is ex-cted sometime during the week of ne 20th.

———o———

### D YOU KNOW . . . ?

Practically all of Louisiana's black-ap molasses is used for livestock ed.

### D YOU KNOW . . . ?

drin is the best cane borer control emical Louisiana farmers have er used.

### D YOU KNOW . . . ?

Some Louisiana cane growers pro-ce more than 40 tons per acre.

*"Sugar Factory Insurance Specialists"*

**GILLIS, HULSE and COLCOCK, Inc.**

339 Union St. New Orleans, La.

Telephone JA 2-1225

**Commercial Members of the AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC.**

AMERICAN MOLASSES CO., OF LOUISIANA, INC.
400 N. Gayoso St.
New Orleans, La.

HARRY L. LAWS & CO., INC.
126 Carondelet Street
New Orleans 12, La.

THE HIBERNIA NATIONAL BANK
New Orleans, La.

LAMBORN & COMPANY, INC.
Whitney Building
New Orleans, La.

LEBOURGEOIS BROKERAGE CO.
823 Perdido Street
New Orleans, La.

THE NATIONAL BANK OF COMMERCE
New Orleans, La.

NATIONAL SUGAR REFINING CO.
Carondelet Bldg.
New Orleans, La.

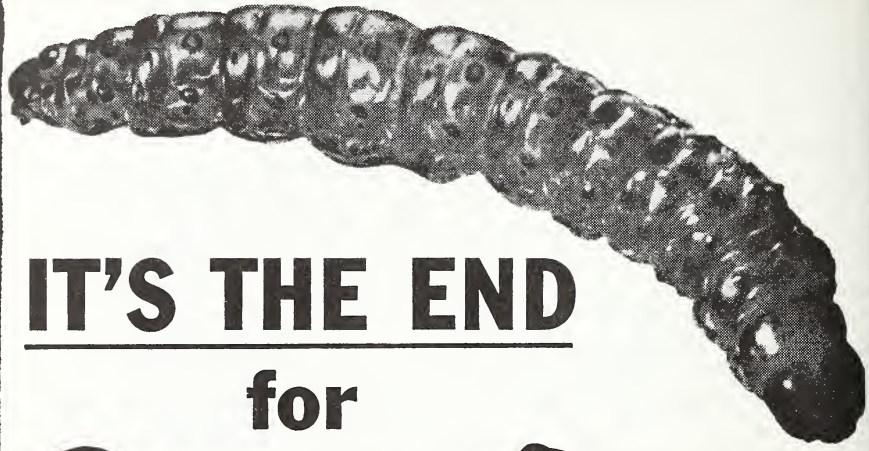
PENICK & FORD LTD., INC.
National Bank of Commerce Bldg.
New Orleans, La.

ESSO STANDARD OIL COMPANY
(Louisiana Division)
P. O. Box 1250 New Orleans 10, La.

STANDARD SUPPLY & HARDWARE CO., INC.
822 Tchoupitoulas St.
New Orleans, La.

STATE AGRICULTURAL CREDIT CORP., INC.
837 Whitney Building
New Orleans, La.

WHITNEY NATIONAL BANK
New Orleans, La.



# IT'S THE END for Sugar Cane Borer!

endrin

The days when sugar cane borer strikes and steals a lion's share of your hard-earned profits are over. You can fight back with endrin insecticide . . . it's the end for sugar cane borer.

Endrin has been thoroughly tested and approved for control of sugar cane borer. For best results, apply endrin granules by air.

Put an end to sugar cane borer damage this season. Use endrin! It's available from your insecticide dealer. Don't delay—see him today!

**SHELL CHEMICAL CORPORATION**

AGRICULTURAL CHEMICALS DIVISION

119 South Claiborne Avenue, New Orleans 12, Louisiana

SHELL

La. State University Library
Acquisitions Dept.
Baton Rouge 3,La.

LOUISIANA STATE UNIVERSITY LIBRARY

# THE SUGAR BULLETIN

38—No. 19 JULY 1, 1960

*ial Bulletin of the American Sugar Cane League of the U. S. A.*

PRINTED ON PAPER MADE FROM
LOUISIANA SUGAR CANE BAGASSE

## *In This Issue*

Up Front With The League ..... 239
**Acreage Measurements**

In The Field With Lloyd L. Lauden ..... 240
**The Contact Committee Meeting**

In Washington With Joe Ferris ..... 241
**The World Market and World Price of Sugar**

The Effect Of Dalapon On The Microflora Of Mhoon Soil ..... 242

Hearing Set On Wages and Prices ..... 245

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry

THE
# SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Ed

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

**Issued on the 1st and 15th of each month.** **Subscription: Member 50 cents a year. Non-Members $3.00 a year.**

**Washington Office, 510 Union Trust Bldg., Washington, D. C.**
**Josiah Ferris, Manager**

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
F. M. Burley, Jr., Youngsville, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

# UP FRONT WITH THE LEAGUE

STATE UNIVERSITY LIBRARY

*by A. W. Dykers*

**Acreage Measurements**

The letter printed below was written on June 10th by Assistant Secretary of Agriculture Marvin L. McLain to Senator Ellender. Apparently the long fight by the League's Acreage Measurement Committee, headed by W. S. Chadwick, for uniform acreage measurements, has finally met with success. The letter follows:

June 10, 1960

*Hon. Allen J. Ellender*
*United States Senate*

Dear Senator Ellender:

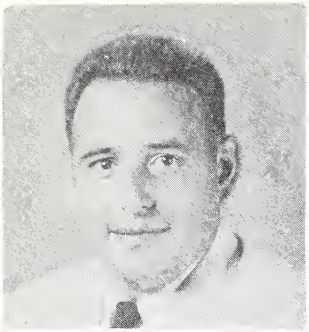
This is in reply to your letter of May 25, 1960, enclosing a copy of a letter from Mr. W. S. Chadwick, Chairman, Crop Measurement Committee, American Sugar Cane League, regarding the measurement of sugarcane acreages in Louisiana.

After further review, we are of the opinion that the League's primary concern is that restrictive proportionate shares for each farm in Louisiana, when reimposed pursuant to the Sugar Act, be based on acreage units, the measurements for which during each year of the base period will be determined by the use of the latest available photography and that acreage compliance be determined by the use of the same such photography.

Accordingly, if and when it becomes necessary to restrict sugarcane acreage in the Mainland Cane Sugar Area, the following procedure will be followed: (1) The acreages determined from the latest available photography will be used as the basis for recording production history during the selected base period and also used for computing individual farm proportionate shares. The notices of proportionate shares will be based on such acreage determinations which also will be available for use by farmers in determining the acreage in the fields to be planted to sugarcane. (2) To the extent that acreages based on old photography are reflected on the farm record cards, such acreages will be recomputed by personnel of Agricultural Stabilization and Conservation County Offices, during the period between the public hearing on the restrictive proportionate share program and planting time, on the basis of the latest available photography. Incidentally, the public hearing would probably be held in April or May of the year preceding the crop to be restricted with planting beginning several months later in August. (3) New photography will not be obtained once the restrictive period has begun without prior consultation with representatives of producers. Acreages for individual farms will not be redetermined unless changes occur in field boundaries or available information shows that other changes have occurred which necessitate redetermination of acreages or unless errors are found in the original calculations of acreages. In the latter event, continuing regulations provide that a farmer who has harvested acreages on the basis of erroneous measurements will not be penalized.

This matter was discussed with Mr. Chadwick on June 3, 1960, and we believe that the procedure outlined above will achieve the objectives desired by the American Sugar Cane League.

Sincerely yours,
*Marvin L. McLain,*
*Assistant Secretary*



# IN THE FIELD WITH LLOYD LAUDE

*by Lloyd L. Lauden*

The Contact Committee meeting held June 23, 1960 at the Houma Station was attended by the largest number of growers in many years. All cane areas were well represented. The Breaux Bridge - St. Martinville area was especially well represented. The farthest area from Houma, the Bunkie - Meeker area, was also well represented. The large attendance from all areas is proof of the interest and appreciation cane growers have for research and the scientists working on the problem of sugar cane.

Many growers who arrived early walked around the station and through the greenhouses. All growers were especially impressed with the many hundred thousand varieties planted on the station. An impressive sign displayed near the entrance to the station said, "There are 600,000 varieties in plant cane and in stubble on this station."

It is certainly reasonable to assume that there is at least one superior variety in 600,000 varieties. It is interesting to point out that each commercial variety released in Louisiana in the past was picked or selected from a far smaller number of varieties than the large number mentioned above. It is also important to point out that in addition to the larger number of varieties being grown for selection the quality of the breeding material has also steadily improved over the past several years. Better parents with higher sugar content are now being crossed.

During the past cane breeding season at the U. S. D. A. Canal Point, Fla. Station Mr. Carl Grassl ma several new crosses with wild can It is hoped that the crosses with n wild canes will eventually yield bree ing material that will produce mos resistant varieties for Louisiana. I H. M. Tysdal, Chief of the Tobac and Sugar Crops Section U. S. D. Beltsville, Md., told the group th crosses with other wild canes are al being produced in India for t U.S.A. sugar industries. The n breeding material from these cross should eventually be important to t Louisiana cane breeding program.

Dr. Richard Breaux told the gro that research studies recently co ducted by Dr. Leo Hebert of t Houma Station and Dr. M. T. Hend son of the L.S.U. Agronomy Depa ment is benefitting the selection pr gram. This study shows that ma important characteristics used in s lecting a variety from the single st nursery are not very dependable. a result of this work many more s lections will be taken for furth study and testing.

Dr. Leo Hebert told the group a research project conducted over three-year period on dirting cane d ing cultivation. The informati showed that late dirting of cane ga higher yields of cane, higher sucro and more stalks per acre than ear or medium late dirting.

Mr. Rouby Matherne gave an i teresting report on the variety yie trials. The data show that in t average of all tests on light soi C. P. 44-101 produced more sugar p

(Continued on page 246)

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*

## The World Market and World Price of Sugar

The sugar legislative situation is dergoing such rapid and drastic anges, an attempt to tell that story w would be foolish. One thing is sured, however, the Sugar Act will extended with some changes.

The Cooley Bill, H.R. 12311 which s reported out by the Committee Agriculture June 6th, has been re-rned to the Committee by Chair-n Cooley, and is now being rewrit-n. The Report to accompany the iginal Cooley Bill, Report 1746, is e of the best and most compre-nsive reports ever issued on a sug- bill. One portion of that report ntains such a splendid, intelligent planation of "The World Market d the World Price of Sugar", that is reproduced here for the benefit those who have not been able to tain a copy of the Report.

"With the recent interest that has cused on the Sugar Act, there is viously a widespread and unfor-nate misunderstanding about the ice paid for Cuban sugar and do-estic sugar on the U. S. market, and e price of sugar on the so-called orld market. The very use of the rms "world price" and "world mar-t" are a misleading use of words. nly about 12 percent of the world's gar production is traded on the isnamed "world market." This is sentially unwanted sugar and the ading in this small part of the orld's sugar supply cannot and does ot establish a true world price or flect the actual value of sugar.

World consumption of sugar now nounts to about 52 million tons a ar. Of this amount, some 38 million tons are consumed in the countries where it is produced. In nearly all instances, as in the United States, because of the essentiality of the product it is produced under some kind of national control, bounty, or subsidy system. This leaves 14 million tons to be consumed outside the countries of production. Of this 14 million tons 8 million tons are traded under the terms and provisions of special systems, including the British Commonwealth sugar system, the French sugar program and the U. S. sugar program. This leaves only 6 million tons for trading in the so-called world market.

In the truest sense of the word, this sugar is homeless sugar; it has no specific place to go. It is traded on a "residual market." Since it is a residual market, and since world production usually tends to exceed world consumption, it is also normally a very depressed market. However, because of the very character of this so-called world market, it is an extremely volatile market reacting violently to international tensions or to changes in supply and demand. For example, during the disturbed situation brought on by the Suez crisis and the events in Hungary 3 years ago, the price on this market nearly doubled in 60 days. Throughout the latter half of 1950 and almost all of 1951, this so-called world price was higher than the U. S. price, reaching a differential above the U. S. price of 1.85 cents per pound in June 1951. A similar situation prevailed in the 1957 period above referred to when

(Continued on page 246)

# THE EFFECTS OF DALAPON ON THE MICROFLORA OF MHOON SO

*Lyman A. Magee * and Arthur R. Colmer, Agricultural Experiment Station, Louisiana State University, Baton Rouge, Louisiana*

Dalapon, the active ingredient of which is the sodium salt of 2,2-dichloropropionic acid, has had increasing use in recent years in the control of grasses in croplands. A few investigators have studied the effects of this herbicide on the microorganisms of the soil. Magee and Colmer (1955) demonstrated that a concentration of 7,000 ppm of the herbicide completely inhibited the respiration *in vitro* of *Azotobacter*, one of the nitrogen-fixing bacteria of the soil. Worsham and Giddens (1957) found that field application rates of Dalapon had no effect on the overall soil microbial population except to stimulate growth in some cases.

This study was undertaken in order to show the effects that continued application of these herbicides might have on the population of bacteria, actionomycetes, and moles in one of the sugarcane soils of the L.S.U. experimental plots.

## Materials and Methods

The Dalapon used was the commercial product obtained from the Dow Chemical Company consisting of 85 per cent sodium salt of 2,2-dichloropropionic acid (74 per cent acid equivalent). All concentrations shown are on the basis of the pure acid.

To determine the total number of organisms in the soil, the egg albumen medium described by Fred and Waksman (1928) was used. The organisms growing on this medium were chiefly bacteria. Molds were enumerated by total plate counts on Rose Bengal agar medium described by Martin (1950). The actinomycetes in the soil were estimated with the sodium asparaginate agar of Conn (Fred and Waksman, 1928). "Dalapon-utilizing" organisms were estimated with the basal salts me um described by Magee and Colm (1959) containing 0.5 per cent a monium sulfate and 0.5 per ce Dalapon as the sole carbon source.

Tin cans (size 10) with bottor and tops removed were embedded Mhoon soil near the edge of a cul vated area planted in sugarcane.

In one experiment several cans this soil were treated with differe concentrations of Dalapon and le undisturbed for four weeks at whi time they were removed *in toto*. T contents of each can were sampled quartering (Hall, 1941) and pla counts were made.

In another experiment designed test the effect of repeated applic tions of Dalapon upon the micr flora, the embedded cans were trea ed at four-week intervals with wat solutions of the herbicide to gi final concentrations in the soil shown in the tables of results. San ples were taken by forcing an eigh inch test tube into the center of t can until the tube was half full soil. Each sample was thorough mixed with a sterile spatula unt homogeneous, then a 10 gram portio was used to prepare dilutions f enumeration of the microorganism The first sampling was done fou weeks after the fourth consecutiv monthly treatment. The second san pling was done four weeks after t fifth consecutive treatment.

## Results and Discussion

*Effects of a single Dalapon trea ment on the microflora of the soi* Table 1 shows the microflora of soil four weeks after a single treatmen with different concentrations o Dalapon. It may be seen that ther was a response of the differen groups of organisms to this singl application of the herbicide. As th

Table 1

The effect of a single Dalapon treatment on the microflora of Mhoon soil*

| mple | Total organisms | | Actinomycetes | | Molds | | Dalapon-utilizers | |
|---|---|---|---|---|---|---|---|---|
| | org/gm | % control | org/gm | % control | org/gm | % control | org/gm | % control |
| treated soil ontrol) | 92,200 | - | 22,300 | - | 98 | - | 65,300 | - |
| lapon treated ils: | | | | | | | | |
| 50 ppm | 107,000 | 116 | 21,600 | 97 | 105 | 106 | 58,000 | 89 |
| 500 ppm | 169,000 | 183 | 39,300 | 176 | 191 | 194 | 101,000 | 155 |
| 000 ppm | 243,000 | 264 | 154,000 | 691 | 227 | 230 | 136,000 | 208 |

ounts in thousands per gram

Table 2

The effect of repeated Dalapon treatments on the microflora of Mhoon soil - first sampling*

| nple | Total organisms | | Actinomycetes | | Molds | | Dalapon-utilizers | |
|---|---|---|---|---|---|---|---|---|
| | org/gm | % control | org/gm | % control | org/gm | % control | org/gm | % control |
| treated soil ontrol) | 91,300 | - | 44,500 | - | 363 | - | 15,700 | - |
| lapon treated ils: | | | | | | | | |
| 50 ppm | 26,300 | 29 | 12,500 | 29 | 187,000 | 515 | 16,800 | 107 |
| 00 ppm | 57,800 | 63 | 23,400 | 53 | 8,040** | 22,100 | 66,400 | 423 |

Count in thousand per gram

Count in millions per gram

Table 3

The effect of repeated Dalapon treatments on the microflora of Mhoon soil - second sampling*

| mple | Total organisms | | Actinomycetes | | Molds | | Dalapon-utilizers | |
|---|---|---|---|---|---|---|---|---|
| | org/gm | % control | org/gm | % control | org/gm | % control | org/gm | % control |
| ntreated soil control) | 39,200 | - | 4,030 | - | 280 | - | 13,300 | - |
| lapon treated ils: | | | | | | | | |
| 50 ppm | 50,700 | 129 | 5,280 | 131 | 319 | 114 | 17,800 | 135 |
| 00 ppm | 105,000 | 268 | 21,700 | 538 | 5,130 | 1,830 | 78,700 | 592 |

Counts in thousands per gram

concentration of the agent increased from the 50 ppm application to the 5,000 ppm level, there was an increase in numbers of all the organisms tested for. It is of interest to note that the "Dalapon-utilizers", those organisms which can actually use the herbicide as their sole source of carbon for growth, had a marked increase in numbers as the concentration of the herbicide increased.

*Effects of repeated application of Dalapon upon soil microflora.* Table 2 shows the numbers of bacteria, molds, actinomycetes, and "Dalapon-utilizing" organisms in the soil four weeks after the fourth consecutive monthly treatment of the soil with 50 ppm and with 5,000 ppm Dalapon. Here the microorganisms were subjected to repeated exposure to Dalapon. The organisms detected by the egg albumen medium commonly used in detecting soil bacteria and the distinctive subgroup, the actinomycetes, were harmed by the treatments. This was not the case with the molds and the specialized group of "Dalapon-utilizers"; they increased markedly in numbers due to the continued presence of the herbicide.

Table 3 shows the effects of a further treatment of the soil with Dalapon. Soil treated with 50 ppm of Dalapon showed increases in the numbers of all types of microorganisms, and the soil treated with 5,000 ppm of the herbicide showed extremely large increases.

The results of these experiments suggest that Dalapon not only has no deleterious effect on the microflora of the soil upon single or repeated application of the herbicide in concentrations much higher than field rates, but that it apparently stimulates the multiplication of bacteria, actinomycetes, and molds. Continued application of herbicide to the soil appears to result in an increase in the number of microorganisms which can utilize Dalapon as a sole carbon source, or at least tolerate it in high concentrations. In these experiments, the highest concentration of Dalapon used (5,000 ppm) resulted in th greatest percentage increases numbers of microorganisms.

Stamper (1959) has observed th application rates of Dalapon whi were once effective in controllir weeds in cane fields had to be i creased in subsequent use to secu again effective control. These stu ies with Dalapon and the microflo of Mhoon soil suggest a reason f this observation.

## Summary

Mhoon soils were treated sing and repeatedly with Dalapon (sod um 2,2-dichloropropionate) at rat ranging from 50 to 5,000 ppm. Est mates were made at different tim on the treated soils to determine th effect of the herbicide on the nu bers of bacteria, antinomycete molds, and those organisms capab of growing on a medium containin Dalapon as the sole carbon source.

In the single application test, th 50 ppm rate had little effect on th organisms while the higher concer trations caused an increase in th soil microflora.

When repeated applications of Da apon were made to the test soil there was a marked increase in th molds and "Dalapon-utilizers" and decrease in the bacteria and actin mycetes after the fourth applicatio The tests made after the fifth a plication indicated an increase in a the organisms with a greater i crease with the 5,000 ppm applic tion.

---

* Present address: Department of Micr biology, University of Mississippi School Medicine, Jackson, Mississippi.

## References

Fred, E. G. and Waksman, S. A. 192 **Laboratory Manual of General Micr biology**, 1st ed. McGraw-Hill Boo Company, New York, N. Y.

Hall, William T. 1941. **Textbook of Qua titative Analysis**, 3rd ed., p. 18 John Wiley and Sons, Inc., New Yor N. Y.

Magee, Lyman A. and Colmer, Arthur 1955. The effect of herbicides o soil microorganisms. III. The effe of some herbicides on the respiratio

# HEARING SET ON WAGES AND PRICES

The U. S. Department of Agriculture has announced that a public hearing will be held on Louisiana sugarcane wages and prices in the Grand Theater at Thibodaux, La., July 14, starting at 9:30 a.m.

Testimony will be received on (1) fair and reasonable wage rates for workers in Louisiana employed in harvesting 1960-crop sugarcane, and producing and cultivating sugarcane during 1961, and (2) fair prices which processor-producers must pay for 1960-crop sugarcane purchased from other producers.

One condition producers must meet to qualify for payments under the Sugar Act is to pay all persons employed on the farm in producing, cultivating, or harvesting sugarcane wage rates not less than those determined as fair and reasonable by the Secretary of Agriculture after a public hearing and investigation.

Another condition is that processors who are also producers must pay prices determined to be fair and reasonable for sugarcane purchased from other producers.

To obtain the best possible information, USDA requests that all interested persons appear at the hearing to present views and pertinent data. Information and recommendations are requested specifically on the pricing period for raw sugar and molasses.


of **Azotobacter**. Appl. Microbiol., **3**, 288-292.

Magee, Lyman A. and Colmer, Arthur B. 1959. Decomposition of 2,2-dichloropropionic acid by soil bacteria. Canad. J. Microbiol., **5**, 255-260.

Martin, J. P. 1950. Use of acid, rose bengal, and streptomycin in the plate method for estimating soil fungi. Soil Sci., **69**, 215-232.

Stamper, E. R. 1959. Personal communication.

Worsham, A. D. and Giddens, Joel 1957. Some effects of 2,2-dichloropropionic acid on soil microorganisms. Weeds, **5**, 316-320.



**Commercial Members**
**of the**
**AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC.**

AMERICAN MOLASSES CO., OF LOUISIANA, INC.
400 N. Gayoso St.
New Orleans, La.

HARRY L. LAWS & CO., INC.
126 Carondelet Street
New Orleans 12, La.

THE HIBERNIA NATIONAL BANK
New Orleans, La.

LAMBORN & COMPANY, INC.
Whitney Building
New Orleans, La.

LEBOURGEOIS BROKERAGE CO.
823 Perdido Street
New Orleans, La.

THE NATIONAL BANK OF COMMERCE
New Orleans, La.

NATIONAL SUGAR REFINING CO.
Carondelet Bldg.
New Orleans, La.

PENICK & FORD LTD., INC.
National Bank of Commerce Bldg.
New Orleans, La.

ESSO STANDARD OIL COMPANY
(Louisiana Division)
P. O. Box 1250 New Orleans 10, La.

STANDARD SUPPLY & HARDWARE CO., INC.
822 Tchoupitoulas St.
New Orleans, La.

STATE AGRICULTURAL CREDIT CORP., INC.
837 Whitney Building
New Orleans, La.

WHITNEY NATIONAL BANK
New Orleans, La.

## IN THE FIELD

(Continued from page 240)

acre than either C. P. 52-68, N.Co. 310, C. P. 36-105 or C. P. 48-103, but each of these varieties outyielded C. P. 44-101 in plant cane. Of importance in this data is that N. Co. 310 yielded below its 5-year average for the second consecutive year on light soils. Twenty comparisons between C. P. 47-193 and C. P. 44-101 showed that C. P. 44-101 outyielded C. P. 47-193 by a wide margin in both plant and stubble cane on the light soils.

On heavy soils both N. Co. 310 and C. P. 52-68 produced more sugar per acre than C. P. 44-101 in all tests by 10 and 5 per cent respectively. C. P. 44-101 produced more sugar per acre than either C. P. 36-105, C. P. 48-103, or C. P. 47-193 in these tests last year.

Mr. Lester Davidson told the group that cane is about 13 inches shorter than cane was at this time last year, 8.5 inches shorter than in 1958, and about 24 inches shorter than in 1957. Of interest, however, is the comparison of the 1955 measurements with the present crop measurements. On the average this crop is only about 2 inches shorter than the crop was in 1955 and it must be remembered that the 1955 crop produced 24.4 net tons of cane per acre State average, a record since 1904.

There were many other interesting reports given at this meeting. Watch for the reports of the scientists working on sugar cane in future issues of "The Sugar Bulletin."

## IN WASHINGTON

(Continued from page 241)

the world price went from $2.07 hundred pounds below the U. S. pr in October 1956 to $1.34 above U. S. price in April 1957.

The assumption, therefore, t the United States could buy its su cheaper on the world market tha is obtaining it under the Sugar A is not necessarily valid. Not o would American consumers be victims of the wild price fluctuati and supply uncertainties of the wo sugar market, that market mi very well be higher than the exist American price under our quota s tem for two reasons: (1) Our mestic sugar production would d substantially (possibly even dis pear) without the protection a benefit of the Sugar Act; and ( our annual consumption of sugar greater than the normal residual the so-called world market and competition of the United States this world market would almost evitably result in a very sharp crease in the so-called world pric

## *DID YOU KNOW . . . ?*

That a long time ago, in 1957, suggested that the so called "worl sugar market be called the "wo residual market", which the Hou Agricultural Committee now says is?

Cane Master
THE MARK OF QUALITY

J AND L

- HARVESTERS
- LEVELERS
- CANE TRAILERS
- STUBBLE SHAVERS
- LOADERS
- CARTS
- MECHANICAL HOES
- DRAIN CLEANERS

J. &. L. ENGINEERING CO., INC. Jeanerette, Louisiana

# Get 5 tons* more cane per acre on heavy soils!

* 2½ tons plant and 2½ tons 1st Stubble.

*KILL SOIL INSECTS at planting time with*

# CHLORDANE

Chlordane soil insect control increases yields more than 5 tons per acre at a cost of less than $5.00 per acre, according to an article in the August 15, 1956 issue of THE SUGAR BULLETIN. Read this article and see your county agent for the Louisiana Agricultural Experiment Station booklet on Chlordane dosages and applications.

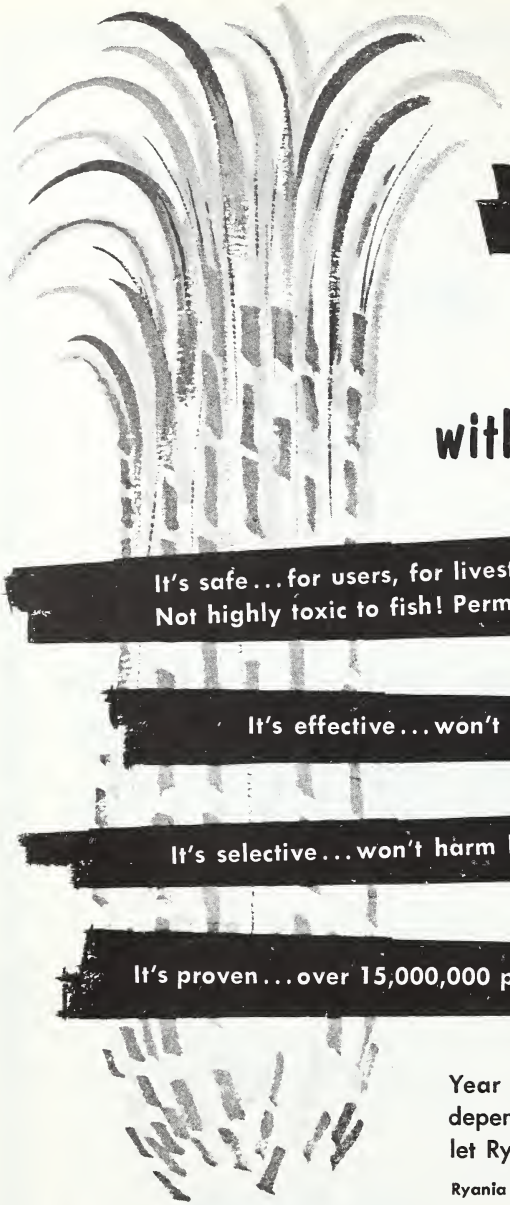
*See Your Dealer Today For*

**CHLORDANE**

**Available In All Cane Growing Areas**

**VELSICOL CHEMICAL CORPORATION**

330 EAST GRAND AVENUE CHICAGO 11, ILLINOIS



you can control

Sugar Cane Borer

right up to harvest

with Ryania!

It's safe... for users, for livestock, for wildlife!
Not highly toxic to fish! Permits use of bagasse for feed!

It's effective... won't develop resistant strains!

It's selective... won't harm beneficial insects!

It's proven... over 15,000,000 pounds used in the past 12 years!

Year after year more and more growers depend on Ryania. This year, as in the past, let Ryania protect *your* crops.

Ryania is covered by Patent Nos. 2,400,295 and 2,590,536.

**Distributed by**

**BARTLETT CHEMICALS, INCORPORATED**
New Orleans, Louisiana

**THOMPSON-HAYWARD CHEMICAL CO.**
New Orleans, Louisiana

PENICK

*Farm Chemical and Insecticide Division*

**S. B. PENICK & COMPANY • 100 CHURCH ST., NEW YORK 8 • 735 W. DIVISION ST., CHICAGO**

La. State University Library
Acquisitions Dept.
Baton Rouge 3,La.

THE SUGAR BULLETIN

38—No. 20 JULY 15, 1960

ial Bulletin of the American Sugar Cane League of the U. S. A.

## WHAT YOUR LEAGUE DUES DO FOR YOU

Part of your League dues are used to pay for publishing *The Sugar Bulletin.* It comes to you twice a month to keep you informed on the latest developments in matters which directly affect you. We know of no other farmers who are kept as currently and completely posted about happenings in their industry as are you and the other Louisiana sugar cane growers

The columns of A. W. Dykers, Lloyd L. Lauden, and Josiah Ferris should be considered "must" reading by every well-informed sugar cane grower. These three are all employees of the League.

Numerous articles on research results and recommendations to cane growers are carried in *The Sugar Bulletin.* This is a service to you and to the County Agents and others upon whose advice you depend.

**Every cane grower can use the information in *The Sugar Bulletin* to earn additional money which far exceeds the 1½ cents per ton of cane he pays in League dues.**

*Warren Harang, Jr.,*
*President*

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry

THE
# SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Edi

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

**Issued on the 1st and 15th of each month.** **Subscription: Member 50 cents a year. Non-Members $3.00 a year.**

**Washington Office, 510 Union Trust Bldg., Washington, D. C.**
**Josiah Ferris, Manager**

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
F. M. Burley, Jr., Youngsville, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

STATE UNIVERSITY LIBRARY

# UP FRONT WITH THE LEAGUE

*by A. W. Dykers*

## The Old Mule

How would you like to be a mule—ıe Old Mule that is—at a time like ıis?

To say that our poor old market ıaracter is in a quandary is putting mildly. Things have been happen-ıg during the past fifteen days. The ew sugar bill was passed on a Sun-ay morning (July 3rd) and Presi-ent Eisenhower signed it into law n July 6th. On the same day he cut ıe Cuban sugar quota 700,000 tons educing the 1960 Castroland share f the U.S. market to zero.

The Castroites, after calling us very name in the book for months, elled like stuck pigs when the Presi-ent finally lowered the boom. This as as expected. The unexpected, as ar as we are concerned, was the un-riendly reaction from Mexico. We ıought the folks below the border ere our friends and this blow from ıe rear surprised us.

## olicy Governing Sugar Purchases

On July 8th the Sugar Division nnounced an increase in the over-all J.S. quota of 200,000 tons raising the otal to 9,600,000 tons, and on July 1th two lots of Philippine raws in the port of New York sold at 6.55 delivered. These were the first sales since the change in the quota setup and the Western Union ticker in the office of the Louisiana Sugar Exchange said that the thirty-point advance in the New York spot price was attributed to "fear there may be a temporary period of tight supplies before the Government works out details of the setup for new sources of supplies."

On July 8th the Sugar Division announced its policy governing the purchases of sugars to replace the Cuban supplies. The official news release on this subject follows:

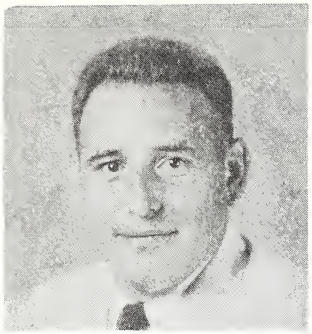
"On July 6 the President issued a statement with regard to the reduction in the Cuban sugar quota for the balance of calendar year 1960. The President indicated that replacement sugar would be purchased from other free world suppliers. Questions have arisen as to how the Department of Agriculture would implement this decision, principally about how the purchases would be made and at what price.

In obtaining sugar to replace

(Continued on page 256)

## *In This Issue*

What Your League Dues Do For You ..... Front Cover
Up Front With The League ..... 250
**The Old Mule—Policy Governing Sugar Purchases—Deficits Reallocated—Blackstrap—Scientists Added State Legislation**
In The Field With Lloyd L. Lauden ..... 252
**Field Days Scheduled**
In Washington With Joe Ferris ..... 253
**The Battle Over The Sugar Bill**
USDA Announces Increase In Determination of Total Sugar Requirements ..... 254
An Act To Amend The Sugar Act Of 1948 ..... 255



# IN THE FIELD WITH LLOYD LAUDEN

*by Lloyd L. Lauden*

## Field Days Scheduled

Many County Agents in the sugar belt are now making final plans for Annual Parish Sugar Cane Field Tours. Below is listed a schedule of the dates and the places of the Sugar Cane Field Tour already announced.

Thursday, July 21

Lafourche Parish Sugar Cane Field Day at Raceland, La., C. J. Arceneaux, County Agent.

Wednesday, July 27

Annual St. Mary Parish Sugar Cane Field Day at Franklin, La., Minus J. Granger, County Agent.

Wednesday, July 27

Iberville Parish Merchant Tour at Plaquemine, La., E. J. Burleigh, County Agent.

Thursday, July 28

St. John Parish Sugar Cane Field Day at LaPlace, La., V. O. Calandro, County Agent.

Friday, July 29

Terrebonne Parish Field Day at Houma, La., Richard L. Sonnier, County Agent.

Tuesday, August 2

West Baton Rouge Parish Annual Field Day at Cinclare Plantation, Port Allen, La., H. A. Webb, County Agent.

Thursday, August 4

St. James Sugar Cane Field Day at F. A. Graugnard and Sons Farm, St. James, La., Kermit Coulon, County Agent.

Cane growers should certainly make plans to attend at least one of these meetings. These tours serve a very useful purpose and make use of an excellent teaching principle, t demonstration plot. The old adag "Seeing Is Believing," holds wi farmers like no other group. Wh a grower witnesses the success a certain practice on another far the usual feeling is, "If he can do I can do it." This is always a healt situation because many growers lea from each other. This can be f reaching, even to cover the enti belt.

County Agents, as well as coope ating farmers, spend considerab time and effort to make the Tou both interesting and informativ Many of the exhibits and demonstr tions are planned one year in a vance. At the invitation of the Cou ty Agent, scientists from L. S. U. an the U. S. D. A. discuss research pro ects and current recommendatio on many phases of growing sug cane.

In addition to the many things t be seen on a Field Tour, there is a ways plenty of neighborly conversa tion, usually about the crop. Refres ments are usually served along wit a good barbecue; then the crop really discussed. Louisiana suga cane growers really enjoy talkin about the crop they grow.

New tractors and new cane fiel equipment are displayed at some o the Field Day Tours. This is alway of interest to growers. Growers ar always interested in any tool tha will reduce man hour requirement to produce an acre of cane.

Some few townfolk can be seen o

(Continued on page 258)

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*

## The Battle Over The Sugar Bill

The legislative battle in the 86th ongress over the Sugar Bill will go own in history as one of the most nfusing and misunderstood issues the past two decades. What start- out to be an extension of a domes- agricultural bill ended up as a ajor foreign relations measure.

In the early morning hours of Sun- ay, July 3rd, when Congress ex- nded the Sugar Act for 90 days nd authorized the President to cut uba's sugar quota, it actually was ltering the map of world trade.

While many of the economic reper- ussions set in motion by that Act ay not be clear for some time, nev- rtheless one certain consequence will e that Cuba's economy is tied much ighter to the Soviet bloc.

Also the intricate mechanism con- rolling international sugar trade ust be overhauled and readjusted. t is regarded as quite likely that uba will withdraw from the Inter- ational Sugar Agreement, that pact etween sugar producing nations hich divides up the world sugar arkets to stabilize prices. That ould be no problem if countries hich will pick up the Cuban cut in ur market reduced by an equal mount their sales to the rest of the world, but this they either can't or won't do. So, in the months to come the pattern of world trade will be radically altered.

Louisiana's Ellender and Russell Long, and Florida's Spessard Holland, are heroes of the Senate melee. For twenty-two and one half hours they fought unceasingly and unsuccessfully to extend the Act for domestic producers. When the measure finally went to conference, Senators Russell Long and Wallace Bennett were the only members of the Senate Finance Committee awake and on hand to serve as conferees. These two gentlemen had against them seven official conferees from the House of Representatives and in addition, the House Majority Leader, John McCormack, who stayed in the conference room and took an active part in the discussions.

The Louisiana sugar industry can well be proud of their spokesmen in Congress; Senators Ellender and Long, and Representatives Boggs, McSween and Willis. They are all individual stars and wonderful teammates in the world's biggest legislative league. The industry should express in no uncertain terms its wholehearted approval and gratefulness for their excellent services.

# USDA ANNOUNCES INCREASE IN DETERMINATION OF TOTAL SUGAR REQUIREMENTS

*(Official Release)*

On July 8th the U.S. Department of Agriculture announced an increase of 200,000 tons in the estimate of total sugar requirements for 1960—from 9,400,000 to 9,600,000 tons.

The official "Statement of Bases and Considerations" for this action follows:

"On Dec. 17, 1959, total sugar quotas for 1960 were established at 9,400,000 tons, the same as the final level for last year. Distribution during the first half of 1960 was 111,000 tons larger than for the first half of 1959 and the period of seasonally heavy consumption is at hand. To make certain that there will be no shortage of raw sugar in light of these facts and the shift in sources of supplies from Cuba to other areas, the total requirements are hereby increased to 9,600,000 tons."

Department officials pointed out that the action, although increasing the level of sugar requirements by 200,000 tons, actually makes available only 140,000 tons of new quota supplies since the President's proclamation of July 6 precludes the allocation to Cuba of approximately 60,000 tons that normally would have been allotted to Cuba under the act prior to the recent amendment.

The new quotas and quantities that may be brought in for direct consumption are shown in the following table:

1960 SUGAR QUOTAS AND "D. C. LIMITS"

| Area and Country | Increase Above Previous Quotas | New Quotas | Direct Consumption limit |
|---|---|---|---|
| | (Short tons, raw value) | | |
| Domestic beet sugar | 44,765 | 2,088,245 | no limit |
| Mainland cane sugar | 13,774 | 642,573 | no limit |
| Hawaii | 24,982 | 1,165,444 | 32,810 |
| Puerto Rico | 26,122 | 1,218,620 | 142,210 |
| Virgin Islands | 357 | 16,618 | 0 |
| Republic of the Philippines | 0 | 980,000 | 59,920 |
| Peru | 8,660 | 104,187 | 10,362 |
| Dominican Republic | 9,900 | 91,357 | 9,238 |
| Mexico | 10,200 | 75,009 | 16,779 |
| Nicaragua | 1,148 | 15,175 | 11,065 |
| Haiti | 419 | 7,433 | 7,000 |
| Netherlands | 140 | 3,871 | 3,871 |
| China | 118 | 3,742 | 3,742 |
| Panama | 118 | 3,742 | 3,742 |
| Costa Rica | 117 | 3,733 | 3,733 |
| Canada | 0 | 631 | 631 |
| United Kingdom | 0 | 516 | 516 |
| Belgium | 0 | 182 | 182 |
| British Guiana | 0 | 84 | 84 |
| Hong Kong | 0 | 3 | 3 |
| All other countries | 0 | 0 | 0 |

# AN ACT TO AMEND THE SUGAR ACT OF 1948

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That section 412 of the Sugar Act of 1948 (relating to termination of the powers of the Secretary under the Act) is amended (1) by striking out "December 31, 1960" and inserting in lieu thereof "March 31, 1961", (2) by inserting, until March 31, 1961" after "power", and (3) by striking out "the crop year 1960 and previous crop years" and inserting in lieu thereof "any crop year beginning prior to March 1, 1961".

SEC. 2. Sections 4501(c) and 6412(d) (relating to the termination and refund of taxes on sugar) of the Internal Revenue Code of 1954 are amended by striking out "June 30, 1961" in each place it appears therein and inserting in lieu thereof "September 30, 1961".

SEC. 3. Section 408 of the Sugar Act of 1948, as amended (relating to suspension of quotas), is amended to designate such section as subsection "(a)"; and to add a new subsection "(b)" as follows:

"(b) Notwithstanding the provisions of title II of this Act, for the period ending March 31, 1961:

"(1) The President shall determine notwithstanding any other provisions of title II, the quota for Cuba for the balance of calendar year 1960 and for the three-month period ending March 31, 1961, in such amount or amounts as he shall find from time to time to be in the national interest: *Provided, however,* That in no event shall such quota at any time exceed such amount as would be provided for Cuba under the terms of title II in the absence of the amendments made herein, and such determinations shall become effective immediately upon publication in the Federal Register of the President's proclamation therefor;

"(2) For the purposes of meeting the requirements of consumers in the United States, the President is thereafter authorized to cause or permit to be brought or imported into or marketed in the United States, at such times and from such sources, including any country whose quota has been so reduced, and subject to such terms and conditions as he deems appropriate under the prevailing circumstances, a quantity of sugar, not in excess of the sum of any reductions in quotas made pursuant to this subsection: *Provided, however,* That any part of such quantity equivalent to the proration of domestic deficits to the country whose quota has been reduced may be allocated to domestic areas and the remainder of such quantity (plus any part of such allocation that domestic areas are unable to fill) shall be apportioned in raw sugar as follows:

"(i) There shall first be purchased from other foreign countries for which quotas or prorations thereof of not less than three thousand or more than ten thousand short tons, raw value, are provided in section 202(c), such quantities of raw sugar as are required to permit importation in such calendar year of a total of ten thousand short tons, raw value, from such country;

"(ii) There shall next be purchased from the Republic of the Philippines 15 per centum of the remainder of such importation;

"(iii) The balance, including any unfilled balances from allocations already provided, shall be purchased from foreign countries having quotas under section 202(c), other than those provided for in the preceding subparagraph (i), in amounts prorated according to the quotas established under section 202(c): *Provided,* That if additional amounts of sugar are required the President may authorize the purchase of such amounts from any foreign countries, with-

(Continued on page 258)

## UP FRONT

(Continued from page 251)

Cuban supplies every effort will be made to use private trade facilities. Plans are now being developed to authorize purchases through trade channels as is now the practice.

It has also been determined that sugar will be purchased first from countries in which it is produced and in general on the basis of prices prevailing in the United States market. In the event any sugar is purchased from sources other than the country of production, only world market prices would be paid."

### Deficits Reallocated

Just as we go to press, word is received from Washington that the USDA has reallocated an accumulated Hawaiian, Puerto Rican and Virgin Lslands deficit totalling 558,000 tons. The Mainland Cane (Louisiana and Florida) adjusted 1960 quota is now 773,873 short tons, raw value. We will never make it.

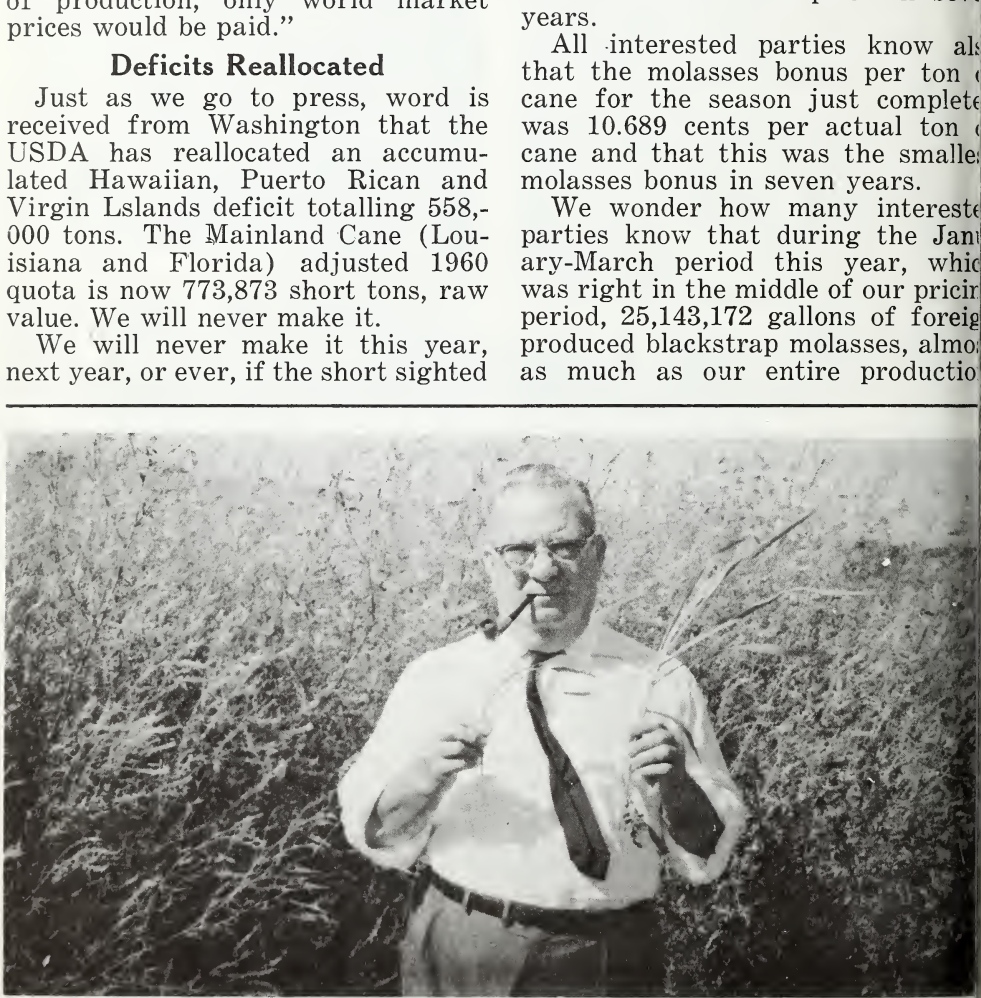
We will never make it this year, next year, or ever, if the short sighted price policy of the Sugar Division continued. Already so many Louisiana cane farmers and sugar factories have been put out of business by the "survival of the fittest" attitude taken by the Sugar Division since the war, that we have nothing in reserve. To us this is inexcusable.

### Blackstrap

All interested parties know by now that the 1959-60 Louisiana season average price of blackstrap molasses was 9.1907 cents a gallon and that this was the lowest price in seven years.

All interested parties know also that the molasses bonus per ton of cane for the season just completed was 10.689 cents per actual ton of cane and that this was the smallest molasses bonus in seven years.

We wonder how many interested parties know that during the January-March period this year, which was right in the middle of our pricing period, 25,143,172 gallons of foreign produced blackstrap molasses, almost as much as our entire production



**In The Tall Clover**

Walter Gonzales, of Milliken & Farwell, Inc., stands by a field of clover on the Waterford Plantation. The clover is used to control Johnson grass. Note the difference in the size of the two seedlings Mr. Gonzales is holding. The small one has been choked back by the clover.

tered the New Orleans customs dis-
ict to compete with Louisiana black-
rap; that 5,275,898 gallons entered
Mobile; that 14,781,936 gallons
tered at Galveston, Texas; 637,970
llons at Sabine, Texas; 826,761
llons at El Paso, Texas, and that
225,425 gallons passed through U. S.
stoms into the state of Arizona.
ese figures are from the weekly
port of the U.S.D.A. Agricultural
rketing Service dated May 18,
60. They total 52,881,162 gallons of
ckstrap which is enough to drown
of us. The duty on foreign black-
rap is less than 7/100 of a cent a
llon.

### Scientists Added

Two additions to the research staff
the Houma station have been made
cently. Dr. Natale Zummo has been
pointed Plant Pathologist, filling
e vacancy created by the resigna-
n of Dr. C. A. Schexnayder, and
r. Hugh P. Fanguy has been named
sistant Agronomist. Both are na-
es of South Louisiana and will feel
home in the sugarcane area.

Dr. Zummo was born at Indepen-
nce, La., in 1931. He later lived in
ooklyn, N. Y., where he graduated
m high school in 1949. He served
the U.S. Navy from 1951 to 1953,
d on being discharged entered
utheastern Louisiana College, from
ich he received the B.S. degree in
56. He then enrolled in the Depart-
nt of Botany, Bacteriology and
ant Pathology at L.S.U., where he
ceived the M.S. degree in plant
thology in May 1958, and the Ph.D.
gree in June 1960. He began work
the Houma station on June 13. He
married and has one child.

Mr. Fanguy was born on a farm in
rrebonne Parish in January 1934,
d except for the time spent at col-
ge, he has lived on a farm all of
s life. He graduated from Terre-
nne High School in 1954. He then
tended Southeastern Louisiana Col-
ge and Nichols State College, each
r one year, before enrolling at
S.U., from which he received the
S. degree in agriculture in Febru-
y 1959. Since that time he has been


**Commercial Members**
**of the**
**AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC.**

AMERICAN MOLASSES CO., OF LOUISIANA, INC.
400 N. Gayoso St.
New Orleans, La.

HARRY L. LAWS & CO., INC.
126 Carondelet Street
New Orleans 12, La.

THE HIBERNIA NATIONAL BANK
New Orleans, La.

LAMBORN & COMPANY, INC.
Whitney Building
New Orleans, La.

LEBOURGEOIS BROKERAGE CO.
823 Perdido Street
New Orleans, La.

THE NATIONAL BANK OF COMMERCE
New Orleans, La.

NATIONAL SUGAR REFINING CO.
Carondelet Bldg.
New Orleans, La.

PENICK & FORD LTD., INC.
National Bank of Com Bldg.
New Orleans, La.

ESSO STANDARD OIL CO
(Louisiana Division)
P. O. Box 1250 New Orleans 10, La.

STANDARD SUPPLY & HARDWARE CO., INC.
822 Tchoupitoulas St.
New Orleans, La.

STATE AGRICULTURAL CREDIT CORP., INC.
837 Whitney Building
New Orleans, La.

WHITNEY NATIONAL BANK
New Orleans, La.

at the Houma station, assisting Drs. Leo P. Hebert and R. D. Breaux in the breeding and seedling work. He is married and has two children.

### State Legislation

The 1960 session of the Louisiana State Legislature has been completed and it is good to be able to report that it was mostly friendly to the Louisiana sugar industry. The American Sugar Cane League is especially pleased that the League-backed unemployment compensation bill, making special provisions for seasonal workers in sugar cane factories (agricultural workers are already completely exempted) was passed with little opposition by both houses, and that the League-backed waste materials bill, granting special assessment consideration for plants using bagasse and other agricultural waste materials, was passed.

The League is also glad that, with the help of the Farm Bureau, it was able to get a Senate committee to kill a bill passed by the House that would have repealed the legislation now in force outlawing the Nutria.

We take this opportunity to publicly thank all members of the Senate and House who supported agriculture during the session just completed and to especially thank Senators Elmore F. Bonin, Samuel S. Broussard, Michael H. O'Keefe, and Horace Wilkinson III, and Representatives Dudley A. Bernard, Lloyd R. Himel, Robert J. Munson, Risley C. Triche, and Sidney S. Sylvester for their support of the unemployment compensation bill. We also extend thanks to Representatives Dudley A. Bernard, Samuel Cashio, Carroll L. Dupont, E. J. Gr zaffei, Lloyd L. Himel, Robert Munson, Warren J. Simon, and Risl C. Triche for their support of t waste materials bill.

—o—

## ACT

out regard to allocation;

"(3) If the President finds th raw sugar is not reasonably ava able, he may, as provided in ( above, cause or permit to be impo ed such quantity of sugar in the fo of direct-consumption sugar as m be required."

SEC. 4. Sections 101(j), 203, 2 (a), 209(a), 209(c), and 307 of t Sugar Act of 1948, as amended, a each amended by striking out t words "The Territory of" in ea place where they appear therein.

—o—

## IN THE FIELD

many of the Field Tours. In th period when public opinion and pu lic relations play such an importa role in business, growers should their best to let the town people kno a little about both their operatio and problems. Maybe more townfo can be encouraged to attend the Tours. It is surprising how few pe ple, other than cane growers, kno the cost of cane field equipment the cost of producing cane.

Get more information about th Field Tours from the County Age and plan to attend at least one th year to learn more about sugar can


Cane Master
THE MARK OF QUALITY

J & L

- HARVESTERS
- LEVELERS
- CANE TRAILERS
- STUBBLE SHAVERS
- LOADERS
- CARTS
- MECHANICAL HOES
- DRAIN CLEANERS

J. &. L. ENGINEERING CO., INC. Jeanerette, Louisiana

# Get 5 tons* more cane per acre on heavy soils!

* 2½ tons plant and 2½ tons 1st Stubble.

*KILL SOIL INSECTS at planting time with*

# CHLORDANE

Chlordane soil insect control increases yields more than 5 tons per acre at a cost of less than $5.00 per acre, according to an article in the August 15, 1956 issue of THE SUGAR BULLETIN. Read this article and see your county agent for the Louisiana Agricultural Experiment Station booklet on Chlordane dosages and applications.

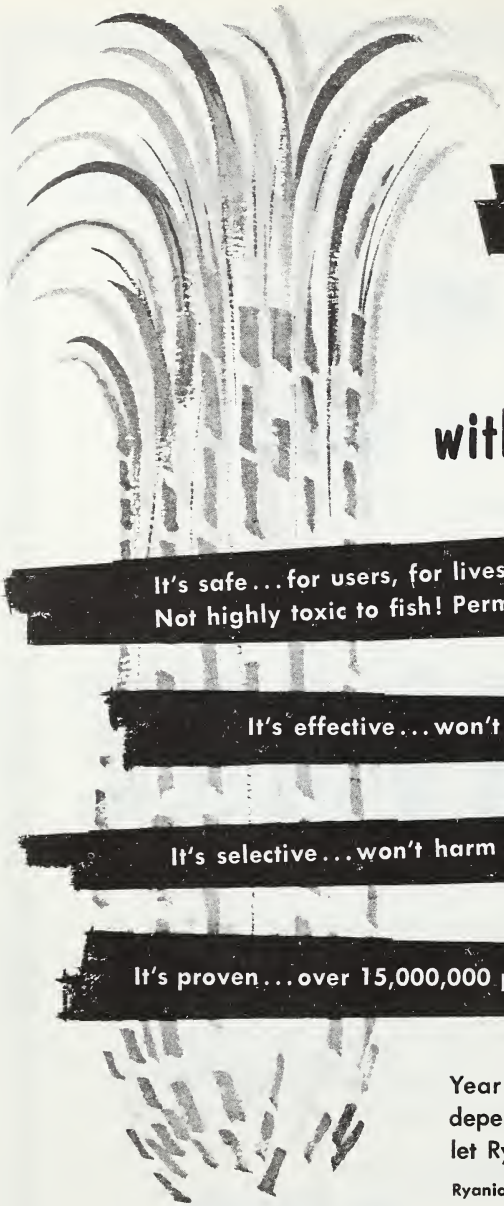
*See Your Dealer Today For*

**CHLORDANE**

**Available In All Cane Growing Areas**

**VELSICOL CHEMICAL CORPORATION**

330 EAST GRAND AVENUE CHICAGO 11, ILLINOIS



you can control

Sugar Cane Borer

right up to harvest

with Ryania!

It's safe... for users, for livestock, for wildlife!
Not highly toxic to fish! Permits use of bagasse for feed!

It's effective... won't develop resistant strains!

It's selective... won't harm beneficial insects!

It's proven... over 15,000,000 pounds used in the past 12 years!

Year after year more and more growers depend on Ryania. This year, as in the past, let Ryania protect *your* crops.

Ryania is covered by Patent Nos. 2,400,295 and 2,590,536.

**Distributed by**

**BARTLETT CHEMICALS, INCORPORATED**
New Orleans, Louisiana

**THOMPSON-HAYWARD CHEMICAL CO.**
New Orleans, Louisiana

PENICK

*Farm Chemical and Insecticide Division*

**S. B. PENICK & COMPANY • 100 CHURCH ST., NEW YORK 8 • 735 W. DIVISION ST., CHICAGO**

Su35
Mrs. Grace Camero
University Station
Baton Rouge, La.
(3)
LOUISIANA STATE UNIVERSITY LIBRARY

# THE SUGAR BULLETIN

38—No. 21 AUGUST 1, 1960

*cial Bulletin of the American Sugar Cane League of the U. S. A.*

WILLIAM ELLIOTT JONES
1881 - 1959

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry

THE
# SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Edito

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

Issued on the 1st and 15th of each month. Subscription: Member 50 cents a year. Non-Members $3.00 a year.

Washington Office, 510 Union Trust Bldg., Washington, D. C.
Josiah Ferris, Manager

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
F. M. Burley, Jr., Youngsville, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

# UP FRONT WITH THE LEAGUE

*by A. W. Dykers*

## A Memorial to Mr. Jones

On June 23rd a plaque was unveiled at the U. S. Sugarcane Field Station, Houma, La., honoring the late William Elliott Jones. The plaque was paid for with funds contributed by the personnel of the Houma Station, supplemented by a special appropriation authorized by the Executive Committee of the American Sugar Cane League. On it are engraved the following words:

"In memory of William Elliott Jones, 1881-1859, who played an important part in bringing the first seed cane of the P.O.J. sugarcane varieties to Louisiana, thereby initiating the rehabilitation of the industry, and whose energetic and stimulating interest in the program of research on the development of improved, disease-resistant varieties of sugarcane, conducted cooperatively by the United States Department of Agriculture, the Louisiana Agricultural Experiment Station, and the American Sugar Cane League of the U.S.A., Inc., contributed profoundly to the success of that program and brought immeasurable benefit to the sugarcane industry of the State, this plaque is affectionately dedicated by his friends and associates."

In his dedication address, Dr. E. V. Abbott, Superintendent of the Houma Station, called attention to the fact that Mr. Jones worked without fanfare and that we easily could forget what he accomplished for the Louisiana Sugar Industry. "It is fitting," Dr. Abbott said, "that we pause to leave a permanent reminder to future workers in the industry of the efforts of one who contributed so much."

The full text of Dr. Abbott's dedication address will be found in this issue, beginning on page 266. Be sure to read it.

## Wrong Word

We made a poor choice of words in the July 15th issue of *The Sugar Bulletin* and hasten to make amends. We should have thanked the State legislators mentioned in our paragraph about State legislation for *sponsoring* the unemployment compensation bill and the waste materials bill. Instead we thanked them for their *support*. This sounded like only the gentlemen mentioned were on our side, which was far from the case.

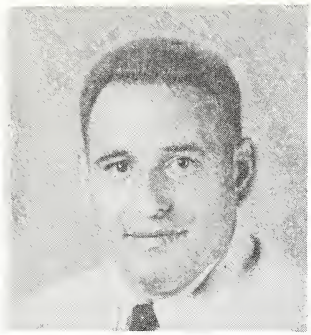
Both the unemployment compensation and the waste materials bills passed the House and the Senate with almost unanimous approval, showing that almost everybody in both Houses supported both bills. The unemploy-

(Continued on page 276)

## *In This Issue*


Up Front With The League ..... 263
**A Memorial To Mr. Jones—Wrong Word—Money For 1961**
In The Field With Lloyd L. Lauden ..... 264
**Planting Suggestions**
In Washington With Joe Ferris ..... 265
Dedication Of Memorial To William Elliott Jones ..... 266
U.S.D.A. Increases Authorized Quantity Of Non-quota Sugar Purchases ..... 268
Louisiana Sugarcane Variety Census For 1960 ..... 270
Report On Sugarcane Breeding At Canal Point, Florida, 1959-60 Season ..... 273


LOUISIANA STATE UNIVERSITY LIBRARY



# IN THE FIELD WITH LLOYD LAUDEN

*by Lloyd L. Lauden*

## Planting Suggestions

Even though there will be very little, if any, cane planted in August this year because of the short height of cane, it is not too early to begin planning the planting operations.

Good cultivating weather thus far has afforded most growers an opportunity to do a fine job of grass control in lands intended to be planted to cane. Since planting will be somewhat delayed this year, growers should continue to control grass longer than usually in lands to be planted but should remember to allow the seedbed time to firm before planting. It is always good to point out that cane planted in a loosely packed seedbed, followed by drought, usually dries out and that stands, very often, are badly affected.

One very important point growers should watch, especially this year, is the cutting of seed cane. Cane will probably be shorter than usual and the tendency may be to cut seed cane too high. Remember to plant good sound cane, not leaves and tops which do not have buds to germinate. Examination of fields over a period of years has indicated that many weak stands are the result of planting immature tops and leaves. This is especially true with varieties that have a long whip type top. Cutting of seed cane is a most important job. Growers and overseers should not only check seed cane cutting operations at the beginning of the planting season but supervision should be given this operation each day and especially when moving from field to field and from variety to variety.

Growers should give some consideration to where the different varieties should be planted on the farm. Some varieties do better than others in heavy soil. Check with the County Agent for variety recommendations for the area. Growers should attempt to isolate or separate mosaic infected cane from mosaic free cane as much as possible. Planting one or more of the mosaic resistant varieties such as C. P. 47-19, C. P. 36-13 or C. P. 36-105 between varieties containing some mosaic disease and those varieties which are free of the disease, is advisable. Plant seed plots intended to be rogued next year away from diseased N. Co. 31 or any other highly infected variety. This will make the job of roguing mosaic disease next year less difficult. Attempt to isolate as much as possible heat-treated seed plots from mosaic diseased cane. Early planted cane is subjected to more fall transmission of the mosaic virus than late planted cane. Since heat-treatment should be done as early as the cane is tall enough for treatment, usually about August 15, this cane is usually planted at a time when it is subjected to a considerable amount of fall transmission of the mosaic virus if planted near mosaic infected cane.

Another important phase of the planting operation is the amount of dirt or soil placed over the cane at planting time. Many growers cover with too much soil. Although some growers will disagree with this statement, there is never any reason for covering cane with more than inches of soil. Plant the cane—don

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*

On July 3 an almost hysterical Congress granted a 90-day reprieve from death to the Sugar Act. Traders and refiners became afflicted with their worst case of jitters in many a long year.

The Bill which extended the Sugar Act from December 31, 1960 to March 31, 1961, authorized the President to cut Cuban quotas, but it also contained a formula for reapportionment to other countries of any reduction in the Cuban quota. By spelling out this formula for reapportionment, Members of Congress, half asleep and weary from a twenty-two and a half hour session, set up a temporary roadblock which for a time threatened American housewives with a sugar shortage at preserving time.

To Sugar Branch Director, Lawrence Myers, normally a fast, clear thinker, the formula was more complicated than a Rube Goldberg cartoon. Mr. Myers not only had to interpret what Congress had written into the law, but also had to contend with the kibitzing of the striped-pants boys from the State Department who were, and are, continually breathing down his neck.

While the sugar experts from the Department of Agriculture and the Department of State were cogitating, the Washington rumor factory was working overtime fabricating some of the wildest, unlikely, and irresponsible rumors since the end of World War II. From July 3 until July 21, according to one of the world's largest sugar brokers "The raw-sugar market was obliged to work in a vacuum."

But at long last, Larry, alias "Moses" Myers, led the trade out of the gloom of the wilderness of confusion with a Press Release which authorized the purchase of an additional 617,385 tons of non-quota sugar from 17 countries during 1960. (See page 268)

What seemed like an ill wind at first actually turned out to be good for domestic producers. All domestic areas have more quotas than they can fill, and are enjoying the best price since 1951.

A domestic continental crop of 7,744,000 tons is forecast by the USDA Crop Reporting Board. This estimate is 6% above last year, and will be the largest crop ever produced in the United States. The estimated production for Florida is a new high for that state, and for Louisiana the largest since 1955.

U. S. producers have been assured by Congressional leaders that the domestic provisions of the Sugar Act are not in jeopardy. While no action is contemplated during the August session, the new Congress which will convene in January will extend the act beyond the March 31, 1961 deadline.

---

bury it—it's alive!

Be sure that the cane is planted at least one and a half to two inches above the middle of the rows. Drainage is especially important after cane is planted. Clean the drains out as soon as planting is completed. Cold weather is bad enough on the seed piece. Don't add a water logged condition to the troubles it already has.

# DEDICATION OF MEMORIAL TO WILLIAM ELLIOTT JONE

*U. S. Sugarcane Field Station, Houma, Louisiana, June 23, 1960*
*Remarks by E. V. Abbott*

A little over a year ago the Louisiana sugarcane industry and the research program of the three cooperating agencies, the U. S. Department of Agriculture, the Louisiana Agricultural Experiment Station, and the American Sugar Cane League of the U.S.A., lost one of their most energetic and devoted members in the death of Mr. William Elliott Jones. There are probably few here today who were associated with Mr. Jones during the entire 42-year period of his services to this industry—it was my privilege to know him for 29 of those years—and with the passing of time, there will be fewer still. As Will Durant has said, "A forgetful world hurries on." Since Mr. Jones' contributions to this industry seldom attracted public attention or reached the printed page, it will be easy for those who were not directly associated with him to lose sight of what he did, and perhaps be unaware of the industry's debt to him. It is fitting, therefore, that we pause to leave a permanent reminder to future workers in the industry of the efforts of one who contributed so much. We are very happy that members of Mr. Jones' family and so many of his friends can be present for this occasion.

Mr. Jones was born in Virginia, and in 1917 he became associated with Southdown Plantation, where he remained until his death. His association with the Louisiana sugarcane industry began shortly before the identification of mosaic disease in the State and the subsequent rapid decline of the noble cane varieties. He naturally shared the general concern of that time for the future of the industry. Early in 1921, with Mr. C. C. Krumbhaar, he attended a meeting of sugar planters in New Orleans, which was addressed by Dr. William E. Cross of Argentina, wl told of his experience with mosa and how the waning industry of th country had been revived by the i troduction of the P. O. J. canes. Th address influenced Mr. Jones to g to Washington, D. C. in the summ of 1921 to confer with Dr. E. V Brandes of the U. S. Department Agriculture regarding the possibili of obtaining seed cane of the P. O. varieties. As a result of that visi a few stalks of P. O. J. 234 were r ceived at Southdown in the spring 1922. From these few stalks, plu small lots of P. O. J. 36 and 213 r ceived the following year, the see supply was increased to the limit c Southdown, and in the fall of 192 the Estate of H. C. Minor, throug Messrs. D. W. Pipes, Jr. and C. Krumbhaar, made available thre fourths of their supply of P. O. J. 23 for distribution to the industry. A account of this generous and publi spirited action on their part is in th issue of *The Sugar Bulletin* for D cember 1, 1924. The effect of th P. O. J. varieties in re-establishin the Louisiana industry on a soun basis is too well known to need rep tition.

This was only the beginning c Mr. Jones' interest in new varietie As an outgrowth of his contact wit Dr. Brandes, and with the joint sup port of the Estate of H. C. Mino Southdown, and of the America Sugar Cane League, the Houma Sta tion was established in 1925 to assis in the testing of new varieties bein produced at the Canal Point, Florid breeding station of the U. S. Depart ment of Agriculture, in cooperatio with the Louisiana Agricultural Ex periment Station. By the late 1920' there was a constant flow of nev canes, including new foreign impor tations, into the Louisiana progra

or testing at Baton Rouge and Houma. From that time until his death, here were few weeks in the year, nd, during certain periods, few days f the week, when Mr. Jones did not isit the Houma station to follow very detail of the testing and performance of the new varieties. He requently did not wait for the results of field tests to be summarized nd tabulated, but would obtain the lot weights from the field men and ucrose analyses from the laboratory, rom which he made his own appraisal of the results, so that he could ecide whether any seed of promising varieties remaining in the field hould be saved.

In the early years of the breeding vork at Canal Point, the seedlings roduced were grown in the field in Florida, and cuttings of the selections vere sent to Louisiana. Because of he great differences in soils, weather, and other environmental conditions between Louisiana and Florida, Mr. Jones feared that seedlings dapted to our conditions might be verlooked in Florida, and he urged hat the true seed be sent here for ermination and testing. During the vinter of 1934-35, when he learned n a personal visit to the Canal Point tation that more seedlings had been roduced than could be accommodated in the field there, Mr. Jones telephoned Dr. Brandes and obtained his onsent to send the surplus seedlings o Louisiana if funds could be provided. Mr. Jones then appealed to he League, with the result that $200 vas made available for sending a ruck from the Houma station to Canal Point to bring some 8,000 seedings to Louisiana. Although the Louisiana Agricultural Experiment Station in its early years had grown many seedlings, this marked the beginning of fairly large scale progeny esting of seedlings in the State. This vork has continued without interruption since that time, and has expanded until we now grow annually several hundred thousand seedlings produced at the Canal Point station. To Mr. Jones is due the credit for instigating the initiation of this program.

Another concern of Mr. Jones was that so much planting material of new varieties was lost in the testing process. While no one realized more than he the importance of thorough testing of varieties to determine their characteristics before release to the industry, he was greatly concerned that there was no provision for conserving seed cane of promising new varieties that might be surplus to experimental needs. At that time, when a variety was released, the supply of seed cane was so small that several years were required before it could be increased to full scale commercial production. Mr. Jones did his best to overcome this lack by gleaning every stalk, and even every eye of new canes from the experimental plots, which he planted in his garden at Crescent Farm or on Southdown, and nurtured with the greatest care. Often he transplanted stubbles of what appeared to be the most promising varieties after the experimental plots were harvested.

Many, perhaps most, of the varieties he so propagated did not make the commercial grade, but one of them, C. P. 44-101, became the leading variety in the industry, a position which it still holds. It may be said with all accuracy that this variety was brought to full scale commercial production at least two years earlier than would have been possible otherwise because during the years of its testing Mr. Jones had conserved every eye of it he could get, and multiplied it by early summer planting and other means to the maximum extent.

Mr. Jones realized, however, that adequately increasing the seed supply of new varieties was not a one-man job. For years he urged the establishment of some system of seed cane increase by the three agencies that would insure an adequate seed supply for distribution when a variety was released. Finally, in 1941, the primary and secondary increase

(Continued on next page)

# USDA INCREASES AUTHORIZED QUANTITY OF NON-QUOTA SUGAR PURCHASE

On July 21st the U. S. Department of Agriculture announced that the Secretary, with the concurrence of the Secretary of State, has authorized the purchase of an additional 617,385 tons of non-quota sugar from 17 countries during 1960. On July 14, 1960 (press release USDA 2033-60) the USDA authorized purchase of 137,234 tons of non-quota sugar from six of these countries. With the increase, a total of 754,619 tons of non-quota sugar has been authorized for purchase during 1960.

The "Statement of Findings and Bases and Considerations" for the action follows:

"On July 14, 1960, pursuant to the Sugar Act of 1948, as amended, and further amended by P. L. 86-592, approved July 6, 1960, the purchase of approximately 137,000 short tons, raw value, of non-quota purchas sugar from six countries was autho ized under subparagraphs (i) an (ii) of Sec. 408(b)(2) of the ac The quantity of sugar which may no be authorized for purchase under Se 408(b) and the President's Procl mation 3355 (25 F. R. 6414) 1,097,540 short tons, raw value.

"Of this quantity a total of 51,47 short tons, raw value, has been a thorized for purchase from Hait Netherlands, China, Panama an Costa Rica, under subparagraphs (i and (ii) of Sec. 408 (b)(2). A quan tity of 109,755 short tons, raw valu has been authorized for purchas from the Republic of the Philippine under subparagraph (ii) of Sec. 40 (b)(2). A quantity of 411,038 sho tons raw value, from other countrie for which quotas have been estab

## DEDICATION

stations were established, and we all know how well they have served the industry.

While we may consider these three things Mr. Jones' outstanding contributions to the industry—initiating bringing the first seed cane of the P. O. J. varieties to Louisiana, instigating large scale progeny testing of seedlings in the State, and the establishment of the seed increase stations —his interests covered the entire gamut of sugarcane production. Research men in all fields felt the stimulation of his inquiring mind. It would be interesting to know how many of the published reports of research by the scientists during the past 30 years were based on ideas conceived in the mind of Mr. Jones. His interest was never in obtaining public recognition for himself, but only in getting the job done. I suspect one might read every issue of *The Sugar Bulletin* from November 1, 1922 to the present without gaining the impression that Mr. Elliott Jones had played an outstanding role in the Louisiana sugar industry. H was a member of the Contact Com mittee of the American Sugar Can League from the time of its organiza tion until his death, and its chairma for many years. He also served a chairman of the Committee on Con trol of Stunting Disease. In thes capacities his role was that of mod erator, counselor, stimulator — bu never seeking recognition for him self. I am sure that nothing wa ever further from his expectation o desire than that such action as w are taking here today would come t pass.

Mr. Jones' public service was no confined to the sugarcane industry He was equally active in many phase of community betterment, giving gen erously of his time to the schoo board, drainage and flood contro problems, and other activities fo civic improvement.

So it is appropriate that we shoul dedicate a permanent memorial t this modest and unselfish man, a fine gentleman, a stimulating com panion and friend.

shed under Sec. 202 (c) of the act as been authorized for purchase under subparagraph (iii) of Sec. 408 b) (2). The quantities for each of he latter group of countries have een established pro rata on the basis f the quotas established for these ountries under Sec. 202 (c) of the ct to the extent of the ability of each ich country to supply sugar. The roviso in subparagraph (iii) of Sec. 08 (b) (2) authorizes the purchase f additional sugar without regard allocations provided for in subaragraphs (i), (ii) and (iii) of that ection if additional amounts of sugr are required. Pursuant to that roviso additional quantities have een authorized for purchase from he following countries in short tons, aw value: British West Indies and ritish Guiana, 70,000; Brazil, 100,-47; El Salvador, 6,000; and Guatemala, 6,000.

"Not authorized for purchase at his time are the Dominican Republic pportionment under subparagraph iii) of Sec. 408 (b) (2) of 291,893 hort tons, raw value, and 51,028 hort tons, raw value, of the Republic of the Philippines apportionment nder subparagraph (ii) of Sec. 408 b) (2).

"The regulation can be amended rom time to time to increase or decrease the quantities of sugar authorzed for purchase from any of the ountries named if it later appears hat supplies from any country will ot be forthcoming in a manner that heets the requirements of this market.

"It is hereby found that raw sugar s not reasonably available in sufficint quantity to supply our requirements during the summer months. Accordingly, sugar testing in excess f 99 degrees polarization may be uthorized for purchase for arrival n the United States prior to Septemer 30 from certain countries specified in Sec. 818.4 provided that such ugar in excess of 2,000 tons from ny such specified country is destined to be further refined or improved in quality in the United States.

"To permit such non-quota purchase sugar to be marketed in an orderly manner it is essential that this regulation be made effective immediately. Therefore, it is hereby determined and found that compliance with the notice, procedure, and effective date requirements of the Administrative Procedure Act is unnecessary, impracticable, and contrary to the public interest, and these amendments to the regulations shall become effective when published in the Federal Register. (Scheduled for July 26.)"

The countries from which non-quota sugar may be purchased and the quantity authorized from each are shown in the following table:

| Country | Short tons, raw value |
|---|---|
| Haiti | 26,567 |
| Netherlands | 6,129 |
| China (Formosa) | 6,258 |
| Panama | 6,258 |
| Costa Rica | 6,267 |
| Republic of the Philippines | 109,755 |
| Peru | 135,000 |
| Mexico | 250,540 |
| Nicaragua | 22,000 |
| Canada | 1,657 |
| United Kingdom | 1,355 |
| Belgium | 478 |
| Hong Kong | 8 |
| British West Indies and British Guiana | 70,000 |
| El Salvador | 6,000 |
| Guatemala | 6,000 |
| Brazil | 100,347 |
| Total | 754,619 |

Non-quota purchase sugar is limited to raw sugar except that sugar testing in excess of 99 degrees polarization is authorized for importation into the United States prior to Sept. 30, from Mexico, Nicaragua, Panama, Costa Rica, Netherlands, Canada, United Kingdom, Belgium, and Hong Kong, within the quantities established above for such countries, provided that such sugar in excess of 2,000 tons from any such country is to be further refined or improved in quality in the United States.

# THE LOUISIANA SUGARCANE VARIETY CENSUS FOR 1960

*By Leo P. Hebert, Research Agronomist, Crops Research Division, Agricultural Research Service, United States Department of Agriculture* [1]

In a survey just completed, the percentage of acreage occupied by each of 9 commercial varieties in Louisiana was estimated for the 3 generally recognized areas of the sugarcane district and for the State as a whole. The County Agents cooperate in this project each year and their knowledge of conditions in their respective parishes greatly simplifies taking the variety census. They contact a representative number of farmers in each parish and base their estimate of the percentage of the acreage in each variety on the results of that survey. The position occupied by the different varieties available to the industry, especially when mosaic disease is spreading and difficulties are encountered in obtaining stands of plant and stubble cane, is of much interest to growers and others engaged in developing new varieties.

## 1960 Plantings

Table 1 presents the results of the 1960 census. The area sampled represents 99.99 percent of the sugarcane grown for sugar in 18 Louisiana parishes according to the Agricultural Stabilization Service of the U. S. Department of Agriculture.[2]

C. P. 44-101, with 48.01 percent of the acreage, is the leading variety in each area and in the State. It is most popular in the southeastern area and least widely planted in the northern area. Only 15 percent of the acreage is devoted to this variety in Avoyelles and Rapides parishes (data not shown) where it has performed poorly in the past. This poor performance was partly due to severe borer damage. Use of endrin to control borers resulted in higher yields for the variety in these parishes, and more of it should be grown there in the next few years.

N. Co. 310 is still in second place in the State and in each of the 3 areas. It is planted on more than
percent of the acreage in the sout
western area and on more than
percent in the northern area. T
approximately 18 percent devoted
it in the southeastern area, the lo
est of the 3 areas, is no doubt due
the desire of growers there to elim
nate the source of mosaic infectio
More of it would be grown in th
area were it not so susceptible
mosaic.

C. P. 36-105, with only 10.32 pe
cent of the State acreage, is in thi
place. It is grown on more than
percent of the acreage in the sout
western area and on about 10 perce
in the southeastern area. C. P. 36-1(
is most extensively grown in t
northern area where it occupies a
proximately 18 percent of the acr
age. Treating for control of ratoo
stunting disease resulted in improve
yields of C. P. 36-105, but other di
advantages such as difficulty in ha
vesting it when lodged, and relativ
ly poor milling and extraction qual
ties, limit the use of the variety o
most farms.

C. P. 44-155 and C. P. 48-103 a
in fourth and fifth places, respe
tively, each being grown on approx
mately 4 percent of the acreage. Th
former variety is most widely grow
in the southwestern area and C. I
48-103 is more popular in the soutl
eastern area, where more than 5 pe
cent of the acreage is devoted to thi
early-maturing variety.

C. P. 52-68, C. P. 47-193, C. P. 3(
13 and C. P. 43-47 follow in that o
der. Each occupies less than 3 pe
cent and in the aggregate they ar
planted on slightly less than 10 pe
cent of the State acreage. Other va
ieties including Co. 290, C. P. 34-12(
C. P. 44-154 and C. P. 29-116 ar
grown on approximately 2 percent o
the sugarcane area. C. P. 34-120 wa
included in reports from the north

Table 1. Results of the 1960 Sugarcane Variety Census in Louisiana

| Variety | Southeastern Area 1/ % | Southwestern Area 2/ % | Northern Area 3/ % | Louisiana (Total) % | Change 1956-60 % | Change 1959-60 % |
|---|---|---|---|---|---|---|
| C. P. 44-101 | 52.49 | 45.07 | 41.52 | 48.01 | -2.73 | +0.37 |
| N. Co. 310 | 18.12 | 25.10 | 20.99 | 21.03 | +16.90 | +1.70 |
| C. P. 36-105 | 10.09 | 6.66 | 18.23 | 10.32 | - 8.44 | -2.12 |
| C. P. 44-155 | 2.79 | 7.93 | 3.16 | 4.63 | - 5.27 | -1.19 |
| C. P. 48-103 | 5.70 | 1.93 | 3.45 | 4.01 | + 4.01 | +0.96 |
| C. P. 52-68 | 3.18 | 1.91 | 3.51 | 2.80 | + 2.80 | +2.35 |
| C. P. 47-193 | 2.98 | 1.37 | 4.72 | 2.72 | + 2.72 | -0.18 |
| C. P. 36-13 | 0.94 | 5.09 | 2.35 | 2.62 | - 1.08 | -0.38 |
| C. P. 43-47 | 2.58 | 0.95 | 1.47 | 1.82 | - 1.25 | +0.22 |
| Others | 1.13 | 3.99 | 0.60 | 2.03 | | |
| Percent of State acreage 4/ | 48.07 | 34.53 | 17.39 | 99.99 | | |

1/ Ascension, Assumption, Lafourche, St. Charles, St. James, St. John and Terrebonne.

2/ Iberia, Lafayette, St. Martin, St. Mary and Vermilion.

3/ Avoyelles, Iberville, Pointe Coupee, Rapides and West Baton Rouge.

4/ Anon. Cropland-Proportionate share-Planted acres of Louisiana sugarcane farms participating in the sugar program by parishes. The Sugar Bulletin 37(22): 289. August 15, 1959.

ern area and the other 3 varieties in those from the southwestern area (data not shown).

The 2 main varieties are grown on approximately 69 percent of the acreage and together they occupy more than 70 percent of the acreage in both the southeastern and southwestern areas. The popularity of these 2 varieties is well known in Louisiana; in fact, C. P. 44-101 has been extensively grown because of its ability to produce high yields of cane and sugar on most soil types under a wide range of conditions. Its good stubbling qualities and its ability to produce relatively mature cane early in the season are also important in making it the most widely planted variety in the State. Poor plant cane stands occur in some years, especially if early-planted cane is damaged by early freezes or by cold weather in late spring. The acreage devoted to any one variety should therefo be limited, thus minimizing the da ger of extensive failure in such a normal years.

## Relative Change in Variety Position

Table 1 and Figure 1 give t changes that have occurred in va ety position in recent times. C. 52-68, with a plus 2.35, and C. P. 3 105, with a minus 2.12, underwe the greatest changes among varieti from 1959 to 1960 (table 1). N important changes occurred in t acreage occupied by the other vari ties in the past year. The gain 0.37 percent by C. P. 44-101 is w within the sampling error, and fact it is surprising that the tre for a reduction in acreage report for the 1959 census was not conti ued. Poor plant cane stands of t variety in the spring of 1960 m result in a reduction in acreage

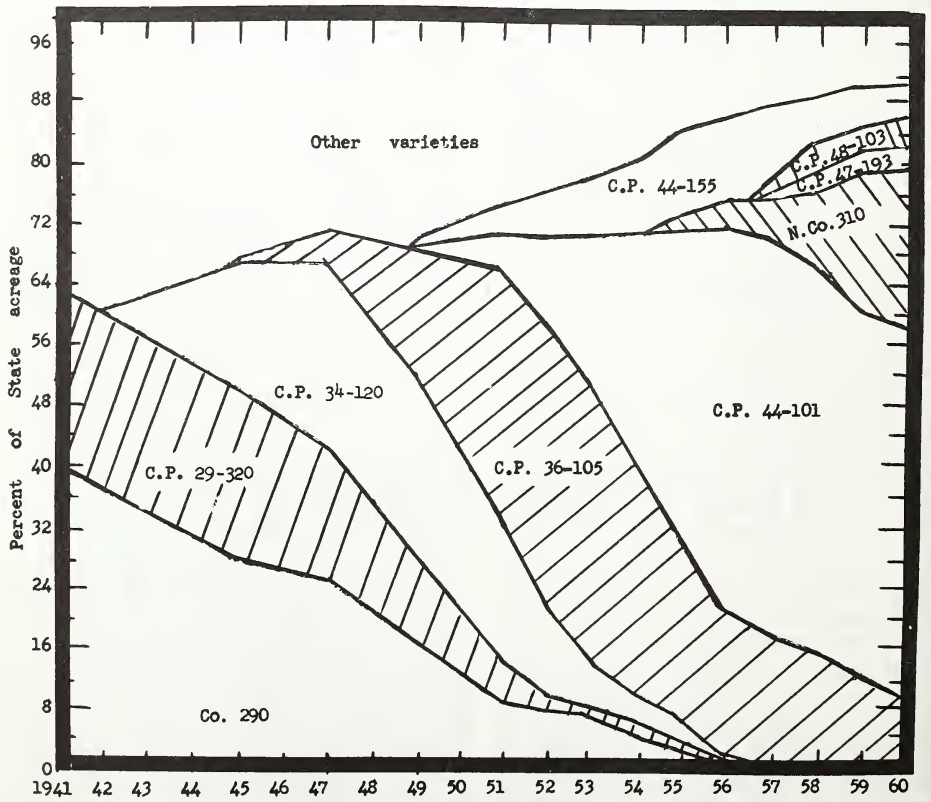



Fig. 1. Changes in the distribution of Louisiana sugarcane acreage among important varieties during the period 1941-1960.

# EPORT ON SUGARCANE BREEDING AT CANAL POINT, FLORIDA, 1959-60 SEASON

*By P. H. Dunckelman* [1]

## Introduction

In keeping with the policy of the anal Point Station, major emphasis the sugarcane breeding program ıring 1959-60 was centered on osses designed to supply seedling ogenies suitable for selection and velopment of varieties for commercial sugar production in Louisiıa.

The recent upsurge of mosaic in mmercial varieties in Louisiana has creased the stress on breeding to velop new resistant varieties of od quality for the industry. Inherıt, "built in" varietal resistance is the ideal means of combatting mosaic and other diseases affecting sugarcane. The Canal Point sugarcane breeding program is concentrating on the production of large numbers of high-quality seedlings from crosses planned to yield disease-resistant commercial varieties.

## Crossing And Seed Production

During the current crossing season at Canal Point, which extended from November 10, 1959, to January 18, 1960, 234 crosses were made in the cubicles of the new plastic covered crossing house; these included

(Continued on next page)

## ENSUS

planted for the 1961 crop. C. P. 1-101 has maintained good yield erformance, and its good stubbling ıalities are recognized by the inıstry.

An increase of 1.70 percent for . Co. 310 since the last census is eported. The rapid spread of mosaic the variety in some areas and the elatively low yields of cane due to te planting of the 1959 crop acounted for much less acreage being evoted to the variety than was inicated in previous years. The greatst gain in acreage by the variety as made during the period 1956-960. C. P. 48-103, with an increase f 4.01 percent, was next in percent ıcrease in the same period. C. P. 6-105, with a minus 8.44 percent nd C. P. 44-155, with a minus 5.27 ercent showed the greatest loss in creage among the varieties. No imortant changes occurred in the perent of the acreage occupied by the ther varieties in the period 1956-960.

Figure 1 shows that C. P. 44-101 as been grown on nearly 50 percent f the acreage for 5 years and on ıore than 30 percent for 7 years. Jo other variety has been planted that extensively in recent years. C. P. 36-105 has occupied 10 percent or more of the acreage for a period of 13 years. In 1952 it reached a peak of approximately 38 percent of the acreage, but the area devoted to it has decreased until it now occupies slightly more than 10 percent of the sugarcane acreage. C. P. 47-193 and C. P. 48-103 will probably never be planted very extensively. They are both limited in their adaptability and are grown for their early maturity. C. P. 47-193 is grown also for its resistance to mosaic. Very little change in the variety census in the next year or two seems probable. C. P. 44-101 will decrease in acreage and C. P. 52-68 will increase to some extent, but the latter's susceptibility to mosaic disease and to cold injury will probably limit its expansion.

---

[1] The author is indebted to the following agents who supplied the information on varietal plantings in the various parishes: Claude Songy, E. J. Lousteau, K. J. Ducote, W. E. Williams, Edward Burleigh, S. J. Bowles, A. J. Brackin, C. J. Arceneaux, Sterling Deville, A. J. Melancon, Jr., Kermit J. Coulon, V. O. Colandro, Stanley Angelle, Minos Granger, Richard Sonnier, Murphy Veillon, and H. A. Webb.

[2] Anon. (Official production tables 1948-58 from A.S.C. Reports). The Sugar Bulletin 37(22): 289. 1959.

4 large polycrosses, the first ever made at Canal Point, and 230 bi-parental and "area" type crosses.

In a polycross many female (non-pollen-producing) varieties are fertilized simultaneously by many male (pollen-producing) varieties. In a bi-parental cross a single female variety is fertilized by a single male variety. An "area" cross consists of fertilizing two or more female varieties by a single male variety. Polycrosses and "area" crosses save time, indoor space, and effort, and make possible, by efficient pollen utilization, the performance of a much larger number of crosses than could otherwise be made.

The 4 polycrosses involved a total of 134 tassels of 20 female varieties and 72 tassels of 17 male varieties accounting for the production of an estimated 56,006 viable seed, or 418 seed per tassel. In most breeding programs employing polycrosses, the pollen-producing (male) tassels are often harvested for seed: many pollen-producing varieties are self-sterile or self-incompatible, but may be fertilized by pollen from other male-fertile types in polycrosses. To eliminate the possibility of selfing, only female tassels were harvested for seed at Canal Point.

The 230 bi-parental and "area" type crosses involved 1,900 tassels; 1,100 of these were tassels of 50 "elite" female breeding clones crossed in various combinations with 800 tassels of 36 male-fertile types with good breeding characteristics including desirable agronomic features and resistance to mosaic, red rot, root rot, borers, cold damage, and inversion. This category of crosses produced an estimated 508,234 viable seed (including seedlings in germination tests) or 462 seed per female tassel.

Crosses of the 1959-60 Canal Point series included 3 distinct species, *S. officinarum, S. spontaneum,* and *S. robustum;* also interspecific hybrids bred in Florida (Canal Point, Clewiston, and Belle Glade), India, Mexico, and the Philippine Islands.

A total of 564,240 viable seed c sugarcane was produced from a types of crosses at Canal Point du ing the 1959-60 breeding season. Th number of seed was more than ad quate to meet the requirements c the cooperating stations in Louisian Florida, Mississippi, and Georgia.

## Influence Of Handling Techniqu On Flowering

One of the objectives of the breec ing program at Canal Point is t discover methods to induce flowerin of non-flowering sugarcane varietie increase flowering of sparse-flowe ing types, and synchronize flowerin of certain early and late-flowerin types. Photoperiod experiments wit sugarcane at Canal Point have give limited results to date; easy flowe ing types have responded but diff cult and non-flowering types have nc been induced to flower.

During the 1959-60 season at Cana Point, a new handling technique wa responsible for improved flowerin of C.P. 29-320, C.P. 53-76, C.P. 50-4( Cl. 47-83, Co. 290, Cana Blanca an D. 74. In September, 1959, the nar row-guage track-and-cart system o the new crossing house was put int partial use to develop flowering o special breeding clones. Favorabl preliminary results with difficult flowering sugarcanes were obtaine by the use of rail carts to roll can plants into the protective shelter o the crossing house at night and o cool days; full advantage was take of the natural photoperiod durin the flowering period and night tem peratures inside the house were hel at levels known to promote floral de velopment.

Four mid-season to late flower ing varieties, C.P. 29-320, C.P. 53-76 C.P. 50-40, and Cl. 47-83, grown i cans, flowered two to three week earlier on carts (rolled indoors a night) than under field condition where night temperatures were be low 55° F. throughout November, De cember, and January. C.P. 53-76 C.P. 50-40, and Cl. 47-83, in additio to emerging panicles early, also wer

ale - fertile on carts, whereas the me clones, flowering outdoors, were ale-sterile.

Co. 290, Cana Blanca, and D. 74 nerally do not flower at Canal int; during 1959-60 these varieties wered on carts. Six can-cultured ols of Co. 290, involving 30 stalks, re placed on carts soon after floral itiation occurred; these were rolled and out of the breeding house to ke advantage of the best natural d artificial environmental condi- ns. Thirty vigorous male-fertile ssels of Co. 290 were produced, aking possible 8 desirable crosses volving 58 female tassels which set estimated 12,136 viable seed. By ntrast, six 10-foot field plots of . 290, containing 360 stalks, did t yield a single tassel; booting of veral stalks occurred in only one t and every inflorescence aborted fore emergence: floral initiation iled to occur in five plots of Co. 290 own on muck. Cana Blanca failed initiate flowers under field con- tions; in can cultures (on carts) f 15 available stalks of this variety wered and were used as females in crosses. D. 74, which has produced ly 3 tassels in field plots at Canal int since 1948, flowered in cans aced on carts during 1959-60, and as used in several crosses; current- D. 74 did not flower in the field.

Constant exposure of container- own and marcotted sugarcane ants to conditions inside the plastic vered crossing house over long pe- ds during the crossing season used some unfavorable reactions th respect to flowering. Many in- rescences became "stuck" within e boot and failed to emerge; the ndless environment within the ossing house resulted in the loss agitation and switching of the tops used by winds outside. Tassels ich emerged from sugarcane plants pt steadily indoors were unspread, th branches tightly enfolded into e shape of a spearhead. Under in- or conditions of elevated tempera- re and humidity mold developed and caused some tassels to rot; it was necessary to sharply "tap" or shake the stalks each day to spread the branches of the emerging inflores- cences. It was noted that exposure to direct sunlight and wind (by use of carts) enhanced emergence of tassels, spread branches of the inflorescence, and prevented development of mold.

In an experiment designed to com- pare flowering of healthy and RSD (ratoon stunting disease)-infected sugarcane at the Canal Point Station during 1959(1), it was found that it may be advantageous to plant healthy and/or RSD-infected seedcane for use in the sugarcane breeding pro- gram. The incidence of flowering was significantly greater in RSD- infected cane of C.P. 29-320 than in healthy cane on sand, custard apple muck, and Okeelanta peaty muck; C.P. 29-320 tassels began emerging 10 days earlier on lakeshore sand, 27 days earlier on custard apple muck, and 6 days earlier on Okeelanta peaty muck in RSD-infected cane than in healthy cane. On lakeshore sand healthy C.P. 44-155 flowered signifi- cantly more than RSD-infected C.P. 44-155; on Okeelanta peaty muck flowering of RSD-infected C.P. 44- 155 was significantly better than that of healthy stock, and the trend of flowering of the variety on custard apple muck was in favor of RSD-in- fected stock. Healthy F. 36-819 flow- ered significantly better than RSD- infected material of the variety; pan- icle emergence in healthy F. 36-819 on sand began 41 days before that in RSD-infected cane. The trend of flowering of F. 36-819 on the two muck locations favored healthy cane. No significant differences were ob- served in flowering of Cl. 41-223, C.P. 48-103, C.P. 50-28, C.P. 52-68, C.P. 53-18, and N. Co. 310.

## Summary

The Canal Point sugarcane breed- ing program is concentrating on the production of large numbers of high-quality seedlings from crosses planned to yield disease - resistant

(Continued on next page)

commercial varieties.

A total of 564,240 viable seed of sugarcane was produced from all types of crosses at Canal Point during the 1959-60 breeding season. This number of seed was more than adequate to meet the requirements of the cooperating stations in Louisiana, Florida, Mississippi, and Georgia.

During the 1959-60 flowering period at Canal Point, a new handling technique was responsible for improved flowering of C.P. 29-320, C.P. 53-76, C.P. 50-40, Cl. 47-83, Co. 290, Cana Blanca, and D. 74.

In an experiment designed to compare flowering of healthy and RSD (ratoon stunting disease)-infected sugarcane at Canal Point Station during 1959(1), it was found that it may be advantageous to plant healthy and/or RSD-infected seed-cane for use in the sugarcane breeding program.

## Literature Cited

1. Dunckelman, P. H. and E. H. Todd. A comparison of flowering of healthy and RSD-infected sugarcane at Canal Point, Florida. (In press).

[1] Research Agronomist, Crops Research Division, Agricultural Research Service, United States Department of Agriculture.

## UP FRONT

(Continued from page 263)

ment compensation bill was amended in the Senate to make it applicable only to processors of raw agricultural products, and with farmers already completely exempted, both branches of our industry are taken care of.

## Money For 1961

Lester Gerard, President of t State Agricultural Credit Corpor tion, has advised the American Sug Cane League that "State" has beg accepting 1961 crop loan applic tions. He says that the 1961 sug cane crop marks the 35th year th the State Agricultural Credit Corp ration has been in the business helping to finance the sugar ca growers of Louisiana.

Headquarters of the State Agricu tural Credit Corporation are in t Whitney Building, New Orleans.

FOR SALE
MOLASSES STORAGE TANK
472,500 Gallon Capacity
5 Ring Riveted Steel Construction
Diameter 74'2" Height 25'1"
Cinclare Central Factory
Brusly, Louisiana

*"Sugar Factory Insurance Specialists"*

GILLIS, HULSE and COLCOCK, Inc.

839 Union St. New Orleans, La.

Telephone JA 2-1225

Cane Master
THE MARK OF QUALITY

J & L

- HARVESTERS
- LEVELERS
- CANE TRAILERS
- STUBBLE SHAVERS
- LOADERS
- CARTS
- MECHANICAL HOES
- DRAIN CLEANERS

J. & L. ENGINEERING CO., INC. Jeanerette, Louisiana

33.61
35
Library, Experiment Station,
University, Station
Baton Rouge, La.
(3)
LOUISIANA STATE UNIVERSITY LIBRARY

# THE SUGAR BULLETIN

38 — No. 22 AUGUST 15, 1960

*cial Bulletin of the American Sugar Cane League of the U. S. A.*

## SPECIAL STATISTICAL ISSUE

### In This Issue

Acreage Planted For Sugar And Seed 1948-1959 ..... 279
Proportionate Shares 1959 ..... 279
Proportionate Shares Harvested For Sugar 1956-1959 ..... 279
Yield Of Cane Per Acre 1956-1959 ..... 279
Yield of Recoverable Sugar Per Acre 1956-1959 ..... 279
Milling Results 1950-1959 ..... 280
Production of Sugar, Syrups and Molasses 1950-1959 ..... 280
In The Field With Lloyd L. Lauden ..... 280A
Total Sugar Requirements Increased To 10,400,000 Tons ..... 280B
Production of Sugar In Louisiana 1900-1959 ..... 281
Growers Income 1937-1959 ..... 282
Producer-Payees, Number of Farms, and Average Acreage in Sugarcane Per Farm 1937-1959 ..... 283
Payments 1959 Crop ..... 284
Farms By Size Groups 1959 Crop ..... 285
Quotations Issued By The Louisiana Sugar Exchange On Raw Sugar and Blackstrap Molasses 1959-60 Pricing Period ..... 286
Production By Louisiana Cane Mills 1959 Crop ..... 288
Results of Sugarcane Variety Tests In Louisiana During 1959 ..... 290
Florida Manufacturing Report ..... 300

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry

THE
# SUGAR BULLETIN

**414 Whitney Bldg., New Orleans 12**

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Edit

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

**Issued on the 1st and 15th of each month.** **Subscription: Member 50 cents a year. Non-Members $3.00 a year.**

**Washington Office, 510 Union Trust Bldg., Washington, D. C.**
**Josiah Ferris, Manager**

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
F. M. Burley, Jr., Youngsville, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

## PLANTED ACRES OF LOUISIANA SUGARCANE FARMS PARTICIPATING IN THE SUGAR PROGRAM (SUGAR ACT OF 1937) BY PARISHES, FROM A. S. C. REPORTS

| PARISHES | Acreage Planted for Sugar and Seed within Proportionate Shares | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1956 | 1957 | 1958 | 1959 |
| Ascension | 13,436 | 14,363 | 14,169 | 15,148.7 | 13,923.3 | 13,402.1 | 12,863.8 | 10,151.1 | 10,261.1 | 9,439.3 | 10,647.5 |
| Assumption | 29,905 | 30,907 | 30,853 | 30,955.0 | 29,900.3 | 31,428.3 | 27,680.6 | 22,628.3 | 25,988.3 | 25,882.7 | 29,397.6 |
| Avoyelles | 2,822 | 2,204 | 2,138 | 1,970.0 | 1,735.4 | 2,147.6 | 1,689.4 | 1,759.9 | 2,254.3 | 1,973.4 | 2,279.6 |
| East Baton Rouge | 585 | 437 | 312 | 331.5 | 388.3 | 83.6 | | | | | |
| East Feliciana | | | | | | | 4 | 4 | | | 3 |
| Iberia | 35,766 | 37,376 | 38,372 | 38,389.3 | 39,340.1 | 40,589.2 | 36,652.1 | 29,493.0 | 31,570.6 | 29,697.4 | 34,763.3 |
| Iberville | 21,453 | 19,845 | 19,841 | 20,727.2 | 19,510.9 | 20,135.7 | 17,899.3 | 13,972.2 | 15,889.0 | 15,621.4 | 17,741.9 |
| Lafayette | 10,094 | 9,317 | 8,685 | 8,728.8 | 8,874.7 | 8,901.7 | 7,647.4 | 6,497.5 | 6,954.8 | 6,654.3 | 7,826.0 |
| Lafourche | 28,504 | 29,008 | 29,246 | 29,501.1 | 29,040.1 | 29,895.3 | 25,129.3 | 21,637.3 | 24,126.7 | 23,632.1 | 26,665.5 |
| Pointe Coupee | 11,314 | 10,370 | 10,326 | 10,473.5 | 9,581.4 | 8,857.7 | 8,685.8 | 8,117.3 | 8,847.1 | 8,262.4 | 10,095.0 |
| Rapides | 1,934 | 1,757 | 1,335 | 1,360.5 | 972.9 | 708.9 | 674.7 | 748.4 | 1,197.6 | 1,238.9 | 1,412.6 |
| St. Charles | 1,502 | 1,646 | 1,531 | 1,549.4 | 1,699.6 | 1,529.3 | 1,441.3 | 1,160.3 | 1,244.5 | 1,243.2 | 1,524.6 |
| St. James | 17,984 | 17,825 | 17,325 | 17,865.4 | 17,482.9 | 17,299.7 | 15,466.7 | 12,246.1 | 14,503.0 | 14,022.5 | 15,428.4 |
| St. John | 14,850 | 15,103 | 15,048 | 14,898.9 | 15,044.6 | 15,179.7 | 13,239.6 | 11,484.1 | 12,790.0 | 12,528.6 | 9,109.6 |
| St. Landry | 923 | 838 | 834 | 515.7 | 172.1 | 184.9 | 128.6 | 143.8 | 235.1 | 34.9 | 36.6 |
| St. Martin | 17,590 | 17,104 | 16,918 | 18,520.1 | 18,872.2 | 19,475.8 | 16,932.6 | 15,197.0 | 16,430.2 | 15,005.1 | 16,798.7 |
| St. Mary | 33,420 | 34,730 | 33,892 | 36,075.4 | 36,877.5 | 37,863.8 | 32,031.4 | 26,055.7 | 30,314.0 | 29,749.8 | 34,216.4 |
| Terrebonne | 34,802 | 35,714 | 35,473 | 34,616.0 | 33,393.7 | 35,032.2 | 31,513.7 | 25,232.9 | 28,808.7 | 28,656.0 | 36,157.4 |
| Vermilion | 4,566 | 5,127 | 3,920 | 3,439.8 | 2,760.9 | 2,633.2 | 2,511.1 | 2,157.8 | 2,218.8 | 1,805.4 | 1,968.8 |
| West Baton Rouge | 13,700 | 13,751 | 13,971 | 14,172.2 | 13,489.0 | 13,527.3 | 12,235.0 | 11,070.4 | 12,604.3 | 12,571.5 | 14,098.9 |
| West Feliciana | 3,688 | 3,337 | 2,392 | 1,785.8 | 1,686.4 | 1,778.1 | 1,939.2 | 1,838.5 | 2,108.7 | 2,064.6 | 2,473.2 |
| TOTAL | 298,838 | 300,769 | 296,581 | 301,024.3 | 294,746.3 | 300,654.6 | 266,362.0 | 221,592.0 | 248,346.8 | 240,083.5 | 272,641.9 |

## PROPORTIONATE SHARE ACRES HARVESTED FOR SUGAR—YIELD OF SUGARCANE PER ACRE AND YIELD OF RECOVERABLE SUGAR PER ACRE OF LOUISIANA FARMERS PARTICIPATING IN THE SUGAR PROGRAM (SUGAR ACT OF 1937) BY PARISHES FROM A. S. C. REPORTS

| PARISHES | Prop. Share | Proportionate Shares Harvested for Sugar (Acres) | | | | Yield of Cane Per Acre Tons | | | | Yield of Recoverable Sugar per Acre CWT | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1959 | 1956 | 1957 | 1958 | 1959 | 1956 | 1957 | 1958 | 1959 | 1956 | 1957 | 1958 | 1959 |
| Ascension | 10,647.5 | 9,543.6 | 9,432.9 | 8,683.8 | 9,748.4 | 25.20 | 21.48 | 22.72 | 21.71 | 43.00 | 32.64 | 37.51 | 35.88 |
| Assumption | 29,397.6 | 20,750.0 | 23,873.5 | 23,919.2 | 27,085.8 | 25.13 | 24.59 | 24.18 | 19.69 | 44.17 | 41.17 | 40.96 | 33.56 |
| Avoyelles | 2,279.6 | 1,658.0 | 2,180.6 | 1,566.1 | 2,189.6 | 20.32 | 18.20 | 20.22 | 21.26 | 31.90 | 25.25 | 32.33 | 32.92 |
| East Baton Rouge | | | | | | | | | | | | | |
| East Feliciana | 3 | 4 | | | 3 | 6.50 | | | | 10.60 | | | |
| Iberia | 34,763.3 | 26,581.5 | 28,166.8 | 26,532.2 | 31,133.1 | 20.35 | 17.97 | 21.45 | 20.05 | 35.64 | 29.20 | 37.80 | 34.26 |
| Iberville | 17,741.9 | 12,764.4 | 14,660.0 | 14,215.8 | 16,178.1 | 29.10 | 26.12 | 24.02 | 19.70 | 49.48 | 41.64 | 40.82 | 32.29 |
| Lafayette | 7,826.0 | 5,883.0 | 6,241.3 | 5,802.3 | 7,031.6 | 21.06 | 15.34 | 15.73 | 16.27 | 33.75 | 24.51 | 25.79 | 26.94 |
| Lafourche | 26,665.5 | 20,105.7 | 21,871.7 | 22,145.7 | 24,687.0 | 23.95 | 24.88 | 24.11 | 19.90 | 42.65 | 41.93 | 42.55 | 33.48 |
| Pointe Coupee | 10,095.0 | 7,666.7 | 8,421.0 | 7,612.7 | 9,386.1 | 23.91 | 22.48 | 21.03 | 21.40 | 40.91 | 34.37 | 34.48 | 32.72 |
| Rapides | 1,412.6 | 699.7 | 1,124.9 | 1,107.9 | 1,277.7 | 24.66 | 19.66 | 23.93 | 23.73 | 38.79 | 27.34 | 38.44 | 38.98 |
| St. Charles | 1,524.6 | 1,084.9 | 1,109.5 | 1,124.2 | 1,411.6 | 20.54 | 20.53 | 20.90 | 18.87 | 36.28 | 33.55 | 37.23 | 32.43 |
| St. James | 15,428.4 | 11,432.1 | 13,496.9 | 13,178.8 | 14,107.5 | 25.99 | 24.03 | 24.12 | 20.62 | 46.66 | 39.83 | 42.54 | 34.09 |
| St. John | 9,109.6 | 10,603.2 | 11,476.6 | 11,756.0 | 8,426.0 | 23.85 | 21.55 | 21.56 | 20.28 | 45.63 | 37.29 | 38.90 | 34.66 |
| St. Landry | 36.6 | 140.8 | 224.9 | 34.9 | 36.6 | 17.10 | 13.52 | 12.83 | 15.73 | 27.19 | 16.68 | 20.50 | 25.32 |
| St. Martin | 16,798.7 | 14,042.8 | 14,848.4 | 13,325.9 | 15,147.9 | 19.85 | 17.52 | 18.00 | 17.97 | 33.52 | 27.90 | 30.74 | 30.11 |
| St. Mary | 34,216.4 | 23,602.1 | 27,274.0 | 27,098.8 | 31,634.1 | 21.96 | 19.77 | 20.50 | 21.49 | 39.87 | 33.62 | 36.83 | 39.28 |
| Terrebonne | 36,157.4 | 23,150.6 | 26,385.4 | 26,185.1 | 33,548.2 | 23.73 | 24.25 | 22.06 | 19.88 | 43.86 | 40.96 | 39.80 | 34.78 |
| Vermilion | 1,968.8 | 1,934.7 | 1,966.7 | 1,642.1 | 1,781.1 | 18.26 | 13.95 | 19.61 | 18.70 | 31.21 | 22.71 | 33.14 | 30.23 |
| West Baton Rouge | 14,098.9 | 10,032.3 | 11,532.4 | 11,311.0 | 12,810.2 | 29.22 | 25.46 | 25.64 | 24.26 | 51.26 | 40.10 | 43.83 | 38.64 |
| West Feliciana | 2,473.2 | 1,609.2 | 1,876.5 | 1,901.7 | 2,209.0 | 22.58 | 26.27 | 23.03 | 21.86 | 38.22 | 33.37 | 36.16 | 31.05 |
| TOTAL | 272,641.9 | 203,285.7 | 226,164.0 | 219,144.2 | 249,829.9 | 23.61 | 22.01 | 22.20 | 20.30 | 41.71 | 36.07 | 38.63 | 34.38 |

## RECAPITULATION OF FINAL REPORTS OF LOUISIANA SUGAR CANE FACTORIES, CROPS 1950-1959, By Mr. Grayson of P. & M. A.

| Total for State Factories | 54 | 54 | 54 | 54 | 54 | 53 | 50 | 49 | 48 | 47 |
|---|---|---|---|---|---|---|---|---|---|---|
| Year | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 |
| Crop Days | 64.2 | 54.2 | 64.24 | 69.5 | 62.9 | 63.9 | 55.02 | 65.6 | 54.8 | 56.0 |
| Lost time % total time | 11.57 | 15.32 | 11.81 | 14.56 | 13.08 | 12.61 | 11.75 | 15.72 | 10.74 | 10.95 |
| Cane: Tons ground, gross weight | 5,550,549 | 4,663,774 | 5,869,257 | 6,054,764 | 5,941,406 | 5,949,155 | 5,109,238 | 5,397,171 | 5,205,760 | 5,436,522 |
| Tons ground, net weight | 5,311,857 | 4,462,854 | 5,666,917 | 5,759 310 | 5,624,800 | 5,664,412 | 4,817,145 | 4,975,915 | 4,878,725 | 5,072,611 |
| % Total Cane Ground, Gross Weight | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Tons Ground per Hour | 71.52 | 74.34 | 77.08 | 74.53 | 79.39 | 83.74 | 84.32 | 81.35 | 92.46 | 94.56 |
| Extraction N. J. % Cane | 72.21 | 72.09 | 72.74 | 71.23 | 72.39 | 73.16 | 72.83 | 70.59 | 73.32 | 73.04 |
| Sucrose Extraction, % | 90.10 | 89.45 | 89.76 | 88.97 | 89.69 | 90.13 | 90.18 | 88.88 | 90.24 | 90.13 |
| Maceration % Cane | 17.04 | 13.89 | 15.69 | 18.56 | 17.08 | 17.58 | 18.83 | 20.00 | 18.88 | 18.62 |
| Fiber % Cane | 14.96 | 14.50 | 14.35 | 14.78 | 14.51 | 14.28 | 14.65 | 15.32 | 14.27 | 14.35 |
| Java Ratio | 76.18 | 74.79 | 76.93 | 75.61 | 75.98 | 76.72 | 75.94 | 74.95 | 76.19 | 76.52 |
| Analysis | | | | | | | | | | |
| Crusher Juice Brix | 17.19 | 15.39 | 16.93 | 17.32 | 16.89 | 16.52 | 17.28 | 16.30 | 17.04 | 16.44 |
| Crusher Juice Sucrose | | | | 13.64 | 13.34 | 12.68 | 13.81 | 12.93 | 13.71 | 13.12 |
| Brix Factor (Final Report) | 97.15 | 97.27 | 97.06 | 97.00 | 96.92 | 96.85 | 96.93 | 97.24 | 96.95 | 97.01 |
| Sucrose Factor (Final Report) | 95.04 | 94.57 | 94.95 | 94.43 | 94.15 | 94.56 | 94.06 | 94.35 | 93.73 | 94.36 |
| Normal Juice Brix | 16.70 | 14.97 | 16.43 | 16.80 | 16.37 | 16.00 | 16.75 | 15.85 | 16.52 | 15.95 |
| Normal Juice Sucrose | 13.03 | 10.80 | 12.22 | 12.88 | 12.56 | 11.99 | 12.99 | 12.20 | 12.85 | 12.38 |
| Normal Juice Purity | 78.02 | 72.14 | 74.38 | 76.67 | 76.73 | 74.94 | 77.55 | 76.97 | 77.78 | 77.62 |
| Factory Syrup, Brix | 58.24 | 56.91 | 58.81 | 58.13 | 56.55 | 57.96 | 57.91 | 56.42 | 57.64 | 56.66 |
| Residual Juice Brix | 6.50 | 6.60 | 6.67 | 6.37 | 6.42 | 5.98 | 6.17 | 6.30 | 6.22 | 5.95 |
| Bagasse Sucrose | 3.22 | 2.93 | 3.23 | 3.40 | 3.27 | 3.07 | 3.18 | 3.17 | 3.22 | 3.12 |
| Bagasse Moisture | 48.45 | 49.51 | 49.69 | 50.06 | 49.99 | 49.82 | 50.05 | 50.50 | 50.44 | 50.52 |
| Bagasse Fiber | 46.63 | 46.18 | 45.75 | 44.20 | 45.45 | 45.68 | 45.54 | 45.06 | 45.13 | 45.19 |
| Press Cake Sucrose | 4.10 | 4.42 | 3.81 | 4.21 | 4.08 | 4.17 | 4.33 | 4.55 | 4.10 | 4.43 |
| Sucrose Balance | | | | | | | | | | |
| Molasses, Sucrose % Cane | 1.132 | 1.261 | 1.164 | 1.105 | 1.022 | 1.096 | 1.041 | 1.053 | .950 | .912 |
| Press Cake, Sucrose % Cane | .158 | .165 | .156 | .180 | .165 | .169 | .167 | .252 | .172 | .190 |
| Undetermined, Sucrose % Cane | .234 | .228 | .177 | .269 | .184 | .151 | .146 | .228 | .116 | .154 |
| Bagasse, Sucrose % Cane | 1.034 | .920 | 1.014 | 1.137 | 1.045 | .959 | 1.030 | 1.078 | 1.019 | .991 |
| Total Losses, Sucrose % Cane | 2.558 | 2.574 | 2.511 | 2.691 | 2.416 | 2.375 | 2.384 | 2.611 | 2.257 | 2.247 |
| Sugar, Sucrose % Cane | 7.886 | 6.154 | 7.390 | 7.622 | 7.720 | 7.353 | 8.104 | 7.075 | 8.188 | 7.794 |
| Total, Sucrose % Cane | 10.444 | 8.728 | 9.901 | 10.313 | 10.136 | 9.728 | 10.488 | 9.686 | 10.445 | 10.041 |
| Pounds 96° Sugar M&E Ton Gross Cane | 164.29 | 128.21 | 153.96 | 158.79 | 160.83 | 153.19 | 168.83 | 147.40 | 170.58 | 162.37 |
| Pounds 96° Sugar M&E Ton Net Cane | 171.67 | 133.98 | 159.46 | 166.93 | 169.88 | 160.89 | 179.07 | 159.87 | 182.02 | 174.02 |
| Gals. F. M. (B/S) M. & E. T/C 80° Brix | 6.90 | 8.01 | 7.82 | 6.94 | 6.67 | 7.28 | 6.56 | 6.52 | 6.37 | 6.17 |
| Boiling House Efficiency | 94.45 | 93.16 | 97.83 | 94.61 | 96.61 | 96.83 | 96.93 | 93.35 | 93.05 | 97.34 |

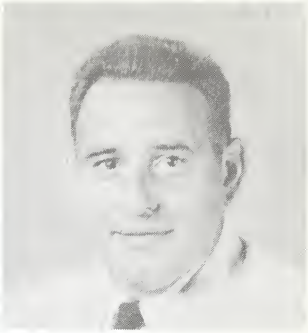
## LOUISIANA MILL REPORTS

**Production of Sugars (tons, 2,000 lbs.), Syrup, 1st Molasses, 2nd Molasses, and Blackstrap—1950-1959**

| | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 |
|---|---|---|---|---|---|---|---|---|---|---|
| Raw Sugar 96° | 331,156 | 215,730 | 325,929 | 358,424 | 376,391 | 363,234 | 336,795 | 304,367 | 340,211 | 361,958 |
| Clarified | 0 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | 0 |
| Turbinados | 35,527 | 26,078 | 36,294 | 37,635 | 41,790 | 43,949 | 40,684 | 40,779 | 40,040 | 37,946 |
| Granulated | 70,534 | 44,019 | 67,199 | 64,910 | 46,710 | 31,754 | 39,319 | 41,846 | 51,679 | 29,368 |
| Washed Raws | 6,248 | 4,273 | 8,393 | 6,373 | ------ | 4,870 | 2,719 | ------ | ------ | 0 |
| Total Sugars (Raw Value) | 456,246 | 296,566 | 450,690 | 480,633 | 478,413 | 455,209 | 431,624 | 397,642 | 442,793 | 440,400 |
| String—Others | 796 | ------ | 157 | 460 | 275 | 904 Lbs. | 128 | ------ | 67 | 204 |
| Sirup—Gallons | 1,725,787 | 1,085,220 | 1,314,161 | 892,146 | 1,224,999 | 1,397,874 | 1,143,480 | 785,571 | 1,246,092 | 1,217,822 |
| 1st Molasses—Gallons | 2,730,680 | 1,599,423 | 1,997,349 | 1,506,982 | 1,450,251 | 1,640,898 | 1,150,873 | 1,200,461 | 1,968,068 | 1,473,398 |
| 2nd Molasses—Gallons | 1,608,557 | 1,684,990 | 2,079,561 | 1,451,038 | 1,369,755 | 1,552,163 | 1,233,328 | 1,352,862 | 1,116,155 | 1,240,674 |
| Blackstrap (Actual Gallons) | 32,703,169 | 20,292,814 | 30,020,807 | 26,710,402 | 24,102,427 | 27,206,214 | 23,650,956 | 23,000,000 | 25,000,000 | 25,000,000 |

# IN THE FIELD WITH LLOYD LAUDEN

*by Lloyd L. Lauden*



## Mr. Taggart Honored

The whole of the Louisiana Sugar ıdustry will be happy to learn that ficers, members and all the 1200 ıests at the St. James Field Day ined on August 4th in congratulatg Mr. W. G. Taggart, retired Direcr of the L.S.U. Experiment Station, hen he received the first St. James ield Day Special Service Award.

Mr. Taggart has devoted more ıan a half-century working on the roblems of Louisiana agriculture. e has always been a special friend the Louisiana Sugar Industry, and uch of his 50 years of active servce were spent working on the probems of growing sugar cane. His conributions to the Sugar Industry and Louisiana agriculture have been ıany, and it is only fitting that he hould have been selected to receive he first Special Service Award preented by the sponsors of the St. ames Field Day.

In addition to the great amount of esearch work Mr. Taggart conducted on cane varieties, fertilization, ane rotation, and cane cultivation uring his half-century of service, his thesis for the Degree of Master of Science was also devoted to sugar cane. The literature cited in this thesis consists of a 99 year cross-section of the writings on the Louisiana sugar industry beginning in 1830. Most of the writings are found in old Journals which have either no index or ones so poorly arranged as to be of little value.

A few extracts from the thesis should be interesting to this industry. For instance, in 1830, Manual Andry of New Orleans, answering a question from Secretary of the U. S. Treasury, is quoted as saying, "Sixty working hands are necessary to cultivate 240 acres of cane in well prepared land, and to do all the work necessary until the sugar is made and delivered. The sugar up to the moment it is delivered costs the planter about three and one-half cents per pound for expenses incurred, without reckoning the interest on his capital."

A quotation from an article written in 1846 says: "The use of poor seed cane is responsible for the de-

(Continued on page 302)

### F. M. Burley, Jr. Dies

It is with sincere regret that we record the death of F. M. Burley, Jr. who died on August 4th after a short illness.

Mr. Burley had just recently been elected to the Executive Committee of the American Sugar Cane League to fill the vacancy created by the death of Col. W. F. Giles. He attended the meeting of the Committee held in New Orleans on July 27th and the news of his untimely death was, of course, a shock to all of us.

To his loved ones we extend our deepest sympathy.

*A. W. Dykers*

# TOTAL SUGAR REQUIREMENTS INCREASED TO 10,400,000 TON

The U. S. Department of Agriculture announced Aug. 1, an increase of 400,000 tons in the estimate of total sugar requirements for 1960, from 10 million to 10.4 million tons.

The Statement of Bases and Considerations for this action follows:

"Sugar refiners in the northeast on July 22 announced a price increase to become effective immediately, which raised wholesale refined sugar prices from 9.40 to 9.70 cents per pound. This action followed an announcement on June 15 which raised the price from 9.20 to 9.40 cents per pound effective as of July 5.

"Increases also have been announced for refined sugar in other marketing areas. The price in New York is now at the highest level since 1923. A substantial quantity of raw sugar estimated at about 200,000 tons was purchased by refiners between July 23 and July 27 at prices rangir between 6.65 and 6.75 cents p pound. This represents the highe price for raw sugar since June 19 and with the exception of a few day it, too, is the highest price since 192

"On July 15, the determination consumers' sugar requirements w increased from 9.6 million to 10 mi lion tons, and in a July 21 action, a additional 617,385 tons of non-quot purchase sugar was allocated to 1 countries, making the total of suc sugar now available and allocate 754,619 tons.

"Apparently, the demand for su ar has accelerated to the point whe supplies can be obtained only at i creasing prices. Accordingly, to pr tect the welfare of consumers, th determination of consumers' suga requirements is hereby increased t 10.4 million tons."

1960 SUGAR QUOTAS AND "D. C. LIMITS"

| Area and Country | Increase in quotas | New Quotas | Direct-consumptic limits |
|---|---|---|---|
| | (short tons, raw value) | | |
| Domestic beet sugar | 0 | 2,514,945 | no limit |
| Mainland cane sugar | 0 | 773,873 | no limit |
| Hawaii | 0 | 940,444 1/ | 35,623 |
| Puerto Rico | 0 | 893,620 1/ | 154,403 |
| Virgin Islands | 0 | 8,618 1/ | 0 |
| Republic of the Philippines | 0 | 980,000 | 59,920 |
| Peru | 17,320 | 138,827 | 11,431 |
| Dominican Republic | 19,800 | 130,957 | 10,191 |
| Mexico | 20,400 | 115,809 | 18,511 |
| Nicaragua | 2,295 | 19,766 | 12,207 |
| Haiti | 837 | 9,105 | 7,000 |
| Netherlands | 278 | 4,427 | 4,427 |
| China | 238 | 4,218 | 4,218 |
| Panama | 238 | 4,218 | 4,218 |
| Costa Rica | 234 | 4,202 | 4,202 |
| Canada | 0 | 631 | 631 |
| United Kingdom | 0 | 516 | 516 |
| Belgium | 0 | 182 | 182 |
| British Guiana | 0 | 84 | 84 |
| Hong Kong | 0 | 3 | 3 |
| All other countries | 0 | 0 | 0 |

[1] Despite declaration of deficits, the full quotas of 1,265,375, 1,323,111, and 18,043 short tons, raw value, for Hawaii, Puerto Rico, and the Virgin Islands, respectively, are available to these areas.

| Crop year | Production 1,000 short tons 1/ | Crop year | Production 1,000 short tons 1/ | Crop year | Production 1,000 short tons 1/ |
|---|---|---|---|---|---|
| 1900 | 309 | 1919 | 124 | 1938 | 491 |
| 1901 | 360 | 1920 | 173 | 1939 | 436 |
| 1902 | 369 | 1921 | 331 | 1940 | 234 |
| 1903 | 256 | 1922 | 301 | 1941 | 322 |
| 1904 | 398 | 1923 | 165 | 1942 | 397 |
| 1905 | 377 | 1924 | 90 | 1943 | 432 |
| 1906 | 258 | 1925 | 142 | 1944 | 369 |
| 1907 | 381 | 1926 | 48 | 1945 | 370 |
| 1908 | 398 | 1927 | 72 | 1946 | 331 |
| 1909 | 327 | 1928 | 135 | 1947 | 297 |
| 1910 | 350 | 1929 | 204 | 1948 | 393 |
| 1911 | 360 | 1930 | 188 | 1949 | 414 |
| 1912 | 157 | 1931 | 160 | 1950 | 451 |
| 1913 | 299 | 1932 | 228 | 1952 | 451 |
| 1914 | 248 | 1933 | 209 | 1953 | 479 |
| 1915 | 140 | 1934 | 234 | 1954 | 478 |
| 1916 | 310 | 1935 | 339 | 1955 | 454 |
| 1917 | 249 | 1936 | 386 | 1956 | 429 |
| 1918 | 286 | 1937 | 401 | 1957 | 396 |
| | | | | 1958 | 443 |
| | | | | 1959 | 440 |

UNITED STATES DEPARTMENT OF AGRICULTURE
Louisiana ASC State Office

GROWERS' INCOME, DOLLARS, THE TON OF SUGARCANE DELIVERED TO LOUISIANA SUGAR MILLS, 1937-59

| | | Paid by Mills | Conditional Payments, Sugar Acts of 1937 and 1948, as Amended | | | | | |
|---|---|---|---|---|---|---|---|---|
| Year | Acct. Cane | Mols. Bonus | Acct. Recoverable Sugar | Abandonment Payment | Deficiency Payment | Total Conditional Payment | Support or CCC Payment | Total Amount Rec'd. |
| 1937 | 2.907 | - | .892 | .023 | .016 | .931 | - | 3.838 |
| 1938 | 2.663 | - | .948 | - | - | .948 | - | 3.611 |
| 1939 | 2.881 | - | .976 | - | - | .976 | - | 3.857 |
| 1940 | 2.717 | - | .908 | .013 | .258 | 1.179 | - | 3.896 |
| 1941 | 3.679 | .256 | .924 | .005 | .084 | 1.013 | - | 4.948 |
| 1942 | 4.033 | .319 | 1.240 | .001 | .084 | 1.325 | - | 5.677 |
| 1943 | 3.936 | .323 | 1.213 | .008 | .023 | 1.244 | .341 | 5.844 |
| 1944 | 3.837 | .313 | 1.165 | .048 | .004 | 1.217 | .826 | 6.193 |
| 1945 | 3.762 | .320 | 1.158 | .008 | .002 | 1.169 | 1.496 | 6.747 |
| 1946 | 6.222 | .322 | 1.235 | .041 | .001 | 1.277 | - | 7.821 |
| 1947 | 6.634 | .609 | 1.250 | .001 | .136 | 1.387 | - | 8.630 |
| 1948 | 5.821 | .058 | 1.180 | .001 | .035 | 1.216 | - | 7.095 |
| 1949 | 6.199 | - | 1.204 | .001 | .030 | 1.235 | - | 7.434 |
| 1950 | 7.146 | .738 | 1.287 | - | .003 | 1.290 | - | 9.174 |
| 1951 | 5.149 | .723 | 1.046 | .039 | .120 | 1.205 | - | 7.077 |
| 1952 | 6.542 | .097 | 1.175 | - | .001 | 1.176 | - | 7.815 |
| 1953 | 6.963 | .141 | 1.263 | .001 | - | 1.264 | - | 8.368 |
| 1954 | 6.582 | .133 | 1.219 | - | - | 1.219 | - | 7.934 |
| 1955 | 6.085 | .170 | 1.155 | .001 | .001 | 1.157 | - | 7.412 |
| 1956 | 7.148 | .720 | 1.288 | - | - | 1.288 | - | 9.156 |
| 1957 | 6.461 | .226 | 1.197 | .005 | .015 | 1.217 | - | 7.904 |
| 1958 | 7.080 | .222 | 1.263 | .001 | .012 | 1.276 | - | 8.578 |
| 1959 | 6.855 | .103 | 1.227 | .001 | .048 | 1.276 | - | 8.234 |

NUMBER OF PRODUCER - PAYEES, NUMBER OF FARMS GROWING SUGARCANE, AND AVERAGE SUGARCANE ACREAGE GROWING PER FARM IN LOUISIANA, 1937 - 1959

| Crop year | Number of producer-payees | Number of farms | Average sugarcane acreage growing per farm |
|---|---|---|---|
| 1937 | 16,572 | 10,260 | 30.1 |
| 1938 | 16,901 | 10,468 | 28.3 |
| 1939 | 17,701 | 10,918 | 24.5 |
| 1940 | 15,635 | 9,332 | 28.4 |
| 1941 | 14,509 | 8,599 | 30.7 |
| 1942 | 14,329 | 8,671 | 34.4 |
| 1943 | 13,439 | 8,052 | 36.1 |
| 1944 | 12,662 | 7,556 | 36.5 |
| 1945 | 10,344 | 6,304 | 44.0 |
| 1946 | 10,151 | 6,141 | 47.8 |
| 1947 | 9,605 | 5,689 | 52.8 |
| 1948 | 10,208 | 5,957 | 50.2 |
| 1949 | 9,711 | 5,559 | 54.1 |
| 1950 | 9,047 | 5,028 | 60.2 |
| 1951 | 8,755 | 4,833 | 58.0 |
| 1952 | 8,237 | 4,463 | 66.0 |
| 1953 | 7,540 | 4,010 | 75.8 |
| 1954 | 7,384 | 3,883 | 70.3 |
| 1955 | 7,424 | 3,861 | 66.4 |
| 1956 | 7,176 | 3,703 | 62.6 |
| 1957 | 6,639 | 3,343 | 74.3 |
| 1958 | 5,936 | 2,908 | 82.6 |
| 1959 | 5,697 | 2,686 | 101.5 |

UNITED STATES DEPARTMENT OF AGRICULTURE
Louisiana ASC State Office

TONS OF SUGARCANE GROUND FOR SUGAR, TOTAL AMOUNT PAID, AND AMOUNT PAID PER ACTUAL AND STANDARD TON OF SUGARCANE GROUND BY LOUISIANA SUGAR MILLS, 1959 CROP

| | Company-Owned Sugarcane | | | | |
|---|---|---|---|---|---|
| | Actual Cane Tons | Standard Cane Tons | Amount Paid | | |
| | | | Acct. Cane | Acct. Molasses | Total Amount |
| Freight Area (a) | 1,220,749 | 1,257,727 | $8,326,398.83 | $131,109.36 | $8,457,508.1 |
| Amount paid per actual ton | | | $6.821 | 10.740¢ | $6.92 |
| Amount paid per standard ton | | | 6.620 | 10.424 | 6.72 |
| Freight Area (b) | 635,332 | 670,612 | 4,419,925.06 | 67,273.14 | 4,487,198.2 |
| Amount paid per actual ton | | | 6.957 | 10.589 | 7.06 |
| Amount paid per standard ton | | | 6.591 | 10.032 | 6.69 |
| Freight Area (c) | 363,119 | 367,973 | 2,407,906.53 | 38,576.72 | 2,446,483.2 |
| Amount paid per actual ton | | | 6.631 | 10.624 | 6.73 |
| Amount paid per standard ton | | | 6.544 | 10.484 | 6.64 |
| STATE | 2,219,200 | 2,296,312 | 15,154,230.42 | 236,959.22 | 15,391,189.6 |
| Amount paid per actual ton | | | 6.829 | 10.678 | 6.93 |
| Amount paid per standard ton | | | 6.599 | 10.319 | 6.70 |

2 - Tons of Sugarcane Ground for Sugar, Total Amt. Paid, and Amt. Paid per Actual and Standard Ton of Sugarcane Ground by Louisiana Sugar Mills, 1959 Crop

| | Independent Growers' Sugarcane | | | | |
|---|---|---|---|---|---|
| | Actual Cane Tons | Standard Cane Tons | Amount Paid | | |
| | | | Acct. Cane | Acct. Molasses | Total Amount |
| Freight Area (a) | 1,370,929 | 1,443,703 | $9,528,708.84 | $147,815.39 | $9,676,524.2 |
| Amount paid per actual ton | | | $6.951 | 10.782¢ | $7.05 |
| Amount paid per standard ton | | | 6.600 | 10.239 | 6.70 |
| Freight Area (b) | 1,077,603 | 1,127,747 | 7,412,073.00 | 114,502.74 | 7,526,575.74 |
| Amount paid per actual ton | | | 6.878 | 10.626 | 6.98 |
| Amount paid per standard ton | | | 6.572 | 10.153 | 6.67 |
| Freight Area (c) | 404,899 | 410,362 | 2,676,262.92 | 43,268.02 | 2,719,530.94 |
| Amount paid per actual ton | | | 6.610 | 10.686 | 6.71 |
| Amount paid per standard ton | | | 6.522 | 10.544 | 6.62 |
| STATE | 2,853,431 | 2,981,812 | 19,617,044.76 | 305,586.15 | 19,922,630.91 |
| Amount paid per actual ton | | | 6.875 | 10.709 | 6.98 |
| Amount paid per standard ton | | | 6.579 | 10.248 | 6.68 |

3 - Tons of Sugarcane Ground for Sugar, Total Amt. Paid, and Amt. Paid per Actual and Standard Ton of Sugarcane Ground by Louisiana Sugar Mills, 1959 Crop

| | Totals | | | | |
|---|---|---|---|---|---|
| | Actual Cane Tons | Standard Cane Tons | Amount Paid | | |
| | | | Acct. Cane | Acct. Molasses | Total Amount |
| Freight Area (a) | 2,591,678 | 2,701,430 | $17,855,107.67 | $278.924.75 | $18,134,032.42 |
| Amount paid per actual ton | | | $6.889 | 10.762¢ | $6.997 |
| Amount paid per standard ton | | | 6.610 | 10.325 | 6.713 |
| Freight Area (b) | 1,712,935 | 1,798,359 | 11,831,998.06 | 181,775.88 | 12,013,773.94 |
| Amount paid per actual ton | | | 6.907 | 10.612 | 7.014 |
| Amount paid per standard ton | | | 6.579 | 10.108 | 6.680 |
| Freight Area (c) | 768,018 | 778,335 | 5,084,169.45 | 81,844.74 | 5,166,014.19 |
| Amount paid per actual ton | | | 6.620 | 10.657 | 6.726 |
| Amount paid per standard ton | | | 6.532 | 10.515 | 6.637 |
| STATE | 5,072,631 | 5,278,124 | 34,771,275.18 | 542,545.37 | 35,313,820.55 |
| Amount paid per actual ton | | | 6.855 | 10.696 | 6.962 |
| Amount paid per standard ton | | | 6.588 | 10.279 | 6.691 |

Freight Area (a) - All mills except those included in Freight Areas (b) and (c) - 24 mills

Freight Area (b) - Mills located north of Bayou Goula between the Atchafalaya and Mississippi Rivers and southeast of New Iberia west of the Atchafalaya River - 14 mills

Freight Area (c) - Mills located north and west of New Iberia west of the Atchafalaya River - 9 mills

UNITED STATES DEPARTMENT OF AGRICULTURE, ASC - LOUISIANA
1959 CROP

NUMBER OF FARMS, PAYEES, PROPORTIONATE SHARES AND PLANTED ACRES AND TONS OF CANE MARKETED FOR SUGAR BY SIZE GROUPS
(Reports Control No. SU-1-R)

| Size Groups 1/ Planted Acres | Number of Farms | Number of Payees | Proportionate Share Acres | Planted Acres 1/ | Tons of Cane |
|---|---|---|---|---|---|
| 0.1 - 4.9 | 294 | 457 | 910.1 | 910.1 | 11,893.8 |
| 5.0 - 9.9 | 314 | 501 | 2,314.3 | 2,314.3 | 32,835.4 |
| 10.0 - 24.9 | 553 | 914 | 9,042.2 | 9,042.2 | 152,256.6 |
| 25.0 - 49.9 | 511 | 1163 | 18,210.2 | 18,210.2 | 326,138.9 |
| 50.0 - 99.9 | 449 | 1177 | 32,010.1 | 32,010.1 | 578,150.9 |
| 100.0 - 199.9 | 295 | 823 | 41,132.8 | 41,132.8 | 768,904.1 |
| 200.0 - 299.9 | 108 | 278 | 26,481.4 | 26,481.4 | 514,939.1 |
| 300.0 - 399.9 | 51 | 124 | 17,570.4 | 17,570.4 | 319,644.8 |
| 400.0 - 499.9 | 28 | 70 | 12,643.2 | 12,643.2 | 244,231.5 |
| 500.0 & above | 83 | 190 | 112,327.2 | 112,327.2 | 2,123,211.2 |
| Totals | 2,686 | 5,697 | 272,641.9 | 272,641.9 | 5,072,206.3 |

1/ Harvested for sugar (except livestock sugar) and seed plus bona fide abandoned acres not in excess of the farm proportionate share.


Cane Master
THE MARK OF QUALITY

J AND L

- HARVESTERS
- LEVELERS
- CANE TRAILERS
- STUBBLE SHAVERS
- LOADERS
- CARTS
- MECHANICAL HOES
- DRAIN CLEANERS

J. &. L. ENGINEERING CO., INC. Jeanerette, Louisiana

HARRY L. LAWS & COMPANY, Inc.

*Established 1871*

126 Carondelet St. New Orleans, La.

*BROKERS*

RAW SUGAR AND BLACKSTRAP MOLASSES

# QUOTATIONS ISSUED BY THE LOUISIANA SUGAR EXCAHNGE INC. ON RAW SUGAR AND BLACKSTRAP MOLASSES 1959-1960 PRICING PERIOD

| Date | N.Y. | Freight | N.O. | B'strap. |
|---|---|---|---|---|
| Oct. 9 | 6.55 | .04 | 6.51 | 9.625 |
| 10 | No Market | | | |
| 11 | Sunday | | | |
| 12 | No Market | | | |
| 13 | 6.55 | .04 | 6.51 | 9.625 |
| 14 | 6.55 | .04 | 6.51 | 9.75 |
| 15 | 6.57 | .04 | 6.53 | 9.75 |
| Weekly Avg. Raws 6.515 | | Blackstrap 9.69 | | |
| Oct. 16 | 6.57 | .04 | 6.53 | 9.625 |
| 17 | No Market | | | |
| 18 | Sunday | | | |
| 19 | 6.57 | .04 | 6.53 | 9.625 |
| 20 | 6.57 | .04 | 6.53 | 9.625 |
| 21 | 6.57 | .04 | 6.53 | 9.625 |
| 22 | 6.57 | .04 | 6.53 | 9.625 |
| Weekly Avg. Raws 6.53 | | Blackstrap 9.625 | | |
| Oct. 23 | 6.57 | .05 | 6.52 | 9.625 |
| 24 | No Market | | | |
| 25 | Sunday | | | |
| 26 | 6.57 | .05 | 6.52 | 9.625 |
| 27 | 6.57 | .05 | 6.52 | 9.625 |
| 28 | 6.57 | .05 | 6.52 | 9.75* |
| 29 | 6.57 | .05 | 6.52 | 9.75 |
| Weekly Avg. Raws 6.52 | | Blackstrap 9.675 | | |
| Oct. 30 | 6.57 | .05 | 6.52 | 9.50* |
| 31 | No Market | | | |
| Nov. 1 | Sunday | | | |
| 2 | 6.57 | .05 | 6.52 | 9.75* |
| 3 | No Market | | | |
| 4 | 6.57 | .05 | 6.52 | 9.75* |
| 5 | 6.57 | .05 | 6.52 | 9.75 |
| Weekly Avg. Raws 6.52 | | Blackstrap 9.69 | | |
| Nov. 6 | 6.57 | .05 | 6.52 | 9.75* |
| 7 | No Market | | | |
| 8 | Sunday | | | |
| 9 | 6.57 | .05 | 6.52 | 9.75* |
| 10 | 6.57 | .05 | 6.52 | 9.75* |
| 11 | No Market | | | |
| 12 | 6.50 | .07 | 6.43 | 9.687* |
| Weekly Avg. Raws 6.50 | | Blackstrap 9.73 | | |
| Nov. 13 | 6.50 | .07 | 6.43 | 9.75* |
| 14 | No Market | | | |
| 15 | Sunday | | | |
| 16 | 6.45 | .08 | 6.37 | 9.75* |
| 17 | 6.40 | .08 | 6.32 | 9.75* |
| 18 | 6.35 | .09 | 6.26 | 9.75 |
| 19 | 6.30 | .09 | 6.21 | 9.75 |
| Weekly Avg. Raws 6.32 | | Blackstrap 9.75 | | |
| Nov. 20 | 6.30 | .10 | 6.20 | 9.75 |
| 21 | No Market | | | |
| 22 | Sunday | | | |
| 23 | 6.30 | .10 | 6.20 | 9.75 |
| 24 | 6.32 | .10 | 6.22 | 9.75* |
| 25 | 6.35 | .10 | 6.25 | 9.75* |
| 26 | No Market | | | |
| Weekly Avg. Raws 6.22 | | Blackstrap 9.75 | | |

| Date | N.Y. | Freight | N.O. | B'strap |
|---|---|---|---|---|
| Nov. 27 | 6.38 | .10 | 6.28 | 9.75 |
| 28 | No Market | | | |
| 29 | Sunday | | | |
| 30 | 6.38 | .09 | 6.29 | 9.75* |
| Dec. 1 | 6.45 | .09 | 6.36 | 9.75* |
| 2 | 6.25 | .09 | 6.16 | 9.75* |
| 3 | 6.25 | .09 | 6.16 | 9.75* |
| Weedkly Avg. Raws 6.25 | | Blackstrap 9.75 | | |
| Dec. 4 | 6.23 | .09 | 6.14 | 9.75* |
| Dec. 5 | No Market | | | |
| 6 | Sunday | | | |
| 7 | 6.23 | .08 | 6.15 | 9.75* |
| 8 | 6.23 | .09 | 6.14 | 9.75 |
| 9 | 6.23 | .09 | 6.14 | 9.75 |
| 10 | 6.20 | .08 | 6.12 | 9.50* |
| Weekly Avg. Raws 6.14 | | Blackstrap 9.70 | | |
| Dec. 11 | 6.20 | .08 | 6.12 | 9.50 |
| 12 | No Market | | | |
| 13 | Sunday | | | |
| 14 | 6.20 | .08 | 6.12 | 9.50 |
| 15 | 6.20 | .08 | 6.12 | 9.50 |
| 16 | 6.20 | .08 | 6.12 | 9.50* |
| 17 | 6.20 | .08 | 6.12 | 9.50* |
| Weekly Avg. Raws 6.12 | | Blackstrap 9.50 | | |
| Dec. 18 | 6.15 | .08 | 6.07 | 9.50* |
| 19 | No Market | | | |
| 20 | Sunday | | | |
| 21 | 6.15 | .08 | 6.07 | 9.50 |
| 22 | 6.10 | .08 | 6.05* | 9.50* |
| 23 | 6.10 | .08 | 6.02 | 9.50* |
| 24 | 6.05 | .08 | 5.97 | 9.50 |
| Weekly Avg. Raws 6.04 | | Blackstrap 9.50 | | |
| Dec. 25 | No Market | | | |
| 26 | No Market | | | |
| 27 | Sunday | | | |
| 28 | 6.05 | .08 | 5.97 | 9.50* |
| 29 | 6.05 | .08 | 5.97 | 9.50* |
| 30 | 6.00 | .08 | 5.92 | 9.50 |
| 31 | 6.00 | .08 | 5.92 | 9.50* |
| Weekly Avg. Raws 5.945 | | Blackstrap 9.50 | | |
| Jan. 1 | No Market | | | |
| 2 | No Market | | | |
| 3 | Sunday | | | |
| 4 | 6.00 | .08 | 5.92 | 9.50* |
| 5 | 5.95 | .08 | 5.87 | 9.50 |
| 6 | 5.95 | .08 | 5.87 | 9.50* |
| 7 | 5.90 | .07 | 5.83 | 9.50* |
| Weekly Avg. Raws 5.87 | | Blackstrap 9.50 | | |
| Jan. 8 | 5.90 | .07 | 5.83 | 9.50 |
| 9 | No Market | | | |
| 10 | Sunday | | | |
| 11 | 5.85 | .07 | 5.78 | 9.50* |
| 12 | 5.88 | .07 | 5.81 | 9.50 |
| 13 | 5.88 | .07 | 5.81 | 9.50 |
| 14 | 5.88 | .07 | 5.81 | 9.50* |
| Weekly Avg. Raws 5.81 | | Blackstrap 9.50 | | |

| Date | N.Y. | Freight | N.O. | B'strap. | Date | N.Y. | Freight | N.O. | B'strap. |
|---|---|---|---|---|---|---|---|---|---|
| Jan. 15 | 5.90 | .07 | 5.83 | 9.50* | Jan. 22 | 5.85 | .08 | 5.77 | 9.50 |
| 16 | No Market | | | | 23 | No Market | | | |
| 17 | Sunday | | | | 24 | Sunday | | | |
| 18 | 5.90 | .07 | 5.83 | 9.50* | 25 | 5.85 | .08 | 5.77 | 9.50 |
| 19 | 5.90 | .07 | 5.83 | 9.50* | 26 | 5.85 | .08 | 5.77 | 9.50 |
| 20 | 5.90 | .08 | 5.90* | 9.50 | 27 | 5.85 | .08 | 5.77 | 9.25* |
| 21 | 5.85 | .08 | 5.77 | 9.50* | 28 | 5.90 | .08 | 5.82 | 9.25 |
| Weekly Avg. Raws 5.83 | | | Blackstrap 9.50 | | Weekly Avg. Raws 5.78 | | | Blackstrap 9.40 | |

Raw Sugar Pricing Period ended January 28, 1960

| Date | B'strap. | Date | B'strap. | Date | B'strap. |
|---|---|---|---|---|---|
| Jan. 29 | 9.25 | Mch. 4 | 8.75 | Apr. 8 | 8.50 |
| 30 | No Market | 5 | No Market | 9 | No Market |
| 31 | Sunday | 6 | Sunday | 10 | Sunday |
| Feb. 1 | 9.25 | 7 | 8.75 | 11 | 8.50 |
| 2 | 9.25 | 8 | 8.75 | 12 | 8.50 |
| 3 | 9.25 | 9 | 8.50* | 13 | 8.50 |
| 4 | 9.25 | 10 | 8.50 | 14 | 8.50 |
| Weekly Avg. Blackstrap 9.25 | | Weekly Avg. Blackstrap 8.65 | | Weekly Avg. Blackstrap 8.50 | |
| Feb. 5 | 9.25 | Mch. 11 | 8.50 | Apr. 15 | No Market |
| 6 | No Market | 12 | No Market | 16 | No Market |
| 7 | Sunday | 13 | Sunday | 17 | Sunday |
| 8 | 9.25 | 14 | 8.50 | 18 | 8.25 |
| 9 | 9.00* | 15 | 8.50 | 19 | 8.25* |
| 10 | 9.00* | 16 | 8.50 | 20 | 8.25 |
| 11 | 9.00 | 17 | 8.50 | 21 | 8.25 |
| Weekly Avg. Blackstrap 9.10 | | Weekly Avg. Blackstrap 8.50 | | Weekly Avg. Blackstrap 8.25 | |
| Feb. 12 | No Market | Mch. 18 | 8.50 | Apr. 22 | 8.25 |
| 13 | No Market | 19 | No Market | 23 | No Market |
| 14 | Sunday | 20 | Sunday | 24 | Sunday |
| 15 | 9.00 | 21 | 8.65* | 25 | 8.25 |
| 16 | 9.00 | 22 | 8.75 | 26 | 8.00 |
| 17 | 9.00* | 23 | 8.75 | 27 | 8.00 |
| 18 | 9.00 | 24 | 8.75 | 28 | 8.00* |
| Weekly Avg. Blackstrap 9.00 | | Weekly Avg. Blackstrap 8.68 | | Weekly Avg. Blackstrap 8.10 | |
| Feb. 19 | 9.00 | Mch. 25 | 8.75 | | |
| 20 | No Market | 26 | No Market | | |
| 21 | Sunday | 27 | Sunday | | |
| 22 | No Market | 28 | 8.50* | | |
| 23 | 9.00 | 29 | 8.50 | | |
| 24 | 9.00 | 30 | 8.50 | | |
| 25 | 8.75* | 31 | 8.50 | | |
| Weekly Avg. Blackstrap 8.94 | | Weekly Avg. Blackstrap 8.55 | | | |
| Feb. 26 | 8.75 | Apr. 1 | 8.50 | | |
| 27 | No Market | 2 | No Market | | |
| 28 | Sunday | 3 | Sunday | | |
| 29 | 8.75 | 4 | 8.50 | | |
| Mch. 1 | 8.75 | 5 | 8.50 | | |
| 2 | 8.75 | 6 | 8.50 | | |
| 3 | 8.75* | 7 | 8.50 | | |
| Weekly Avg. Blackstrap 8.75 | | Weekly Avg. Blackstrap 8.50 | | | |

**SEASON'S AVERAGE PRICES**

**RAWS 6.1819**

**BLACKSTRAP 9.1907**

**SEASON'S AVERAGE FREIGHT DIFFERENTIAL 7.135¢ PER HUNDRED POUNDS**

| Name of Factory | Gross Tons of Cane Ground For Sugar | Net Tons of Cane Ground For Sugar | Pounds o: Refined Granulated |
|---|---|---|---|
| Albania | 108,981 | 102,849 | — |
| Alma | 115,467 | 108,103 | — |
| J. Aron & Co. (Supreme) | 152,912 | 141,853 | 23,045,20( |
| Billeaud | 97,854 | 92,917 | — |
| Breaux Bridge | 85,253 | 78,831 | — |
| W. T. Burton (Cedar Grove) | 81,830 | 75,098 | — |
| Caire & Graugnard | | Not Released | |
| Caldwell | 117,420 | 107,934 | — |
| Catherine (L) | 84,172 | 78,988 | — |
| Columbia (F) | 84,873 | 79,797 | — |
| Cora Texas | | Not Released | |
| Cypremort | 101,008 | 94,524 | — |
| Dugas & LeBlanc (Westfield) | 139,357 | 27,386 | — |
| Duhe-Bourgeois | 127,899 | 121,190 | — |
| Erath | 59,598 | 57,165 | — |
| Evan Hall | 251,556 | 234,393 | — |
| Evangeline | 63,602 | 58,092 | — |
| Frisco (San Francisco) | | Not Released | |
| Glenwood | 150,529 | 139,107 | — |
| Helvetia | 93,935 | 87,893 | — |
| Iberia | 169,571 | 163,208 | — |
| Lafourche (Leighton) | 164,147 | 148,164 | — |
| Harry L. Laws (Cinclare) | 103,398 | 96,186 | — |
| Levert—St. John | 126,304 | 118,546 | — |
| La. State Penitentiary (Angola) | 52,825 | 47,497 | — |
| Lula | 129,730 | 118,173 | — |
| Meeker | 82,351 | 77,448 | — |
| Milliken & Farwell (Little Texas) | 55,933 | 50,841 | — |
| Milliken & Farwell (Smithfeld) | 116,641 | 109,203 | — |
| M. A. Patout & Son (Enterprise) | 156,252 | 145,793 | — |
| Poplar Grove | 87,281 | 82,956 | — |
| St. James | 137,017 | 128,662 | — |
| St. Mary | 157,191 | 148,922 | — |
| South Coast (Georgia) | 118,117 | 109,898 | — |
| South Coast (Oaklawn) | 239,884 | 226,684 | — |
| South Coast (Raceland) | 212,882 | 197,520 | — |
| South Coast (Terrebonne) | 155,805 | 145,519 | — |
| Southdown (Armant) | 138,459 | 129,336 | — |
| Southdown (Greenwood) | 133,657 | 122,917 | — |
| Southdown (Southdown) | 153,563 | 140,956 | 22,943,431 |
| Sterling | 238,317 | 225,955 | — |
| Supples (Catherine) | 69,848 | 66,917 | 4,442,330 |
| Valentine | 152,052 | 138,926 | — |
| Vida | 53,043 | 50,376 | — |
| A. Wilbert's Sons L. & S. Co. | 99,503 | 91,762 | — |
| Young's Industries | 74,923 | 71,435 | — |
| La. State University | 1,299 | 1,223 | — |

# CANE MILLS, 1959 CROP

| Sugar Actually Produced | | | Blackstrap Molasses | |
|---|---|---|---|---|
| Turbinados | Raw Sugar | Total Sugar Prod. Raw Value | Gallons Produced | Gallons Prod. 80° Brix |
| — | 19,421,285 | 19,783,298 | 619,796 | 686,504 |
| — | 16,773,305 | 16,878,041 | 801,043 | 801,043 |
| — | — | 24,658,364 | 1,013,871 | 1,015,765 |
| — | 14,470,860 | 15,181,858 | 626,952 | 711,628 |
| — | 13,169,493 | 13,311,718 | 471,407 | 557,749 |
| — | 12,053,910 | 12,211,547 | 406,814 | 470,743 |
| — | — | 6,706,420 | 0 | 0 |
| — | 18,362,500 | 18,629,123 | 515,189 | 556,274 |
| — | 12,049,160 | 12,055,900 | 504,171 | 563,056 |
| — | 15,497,870 | 15,477,673 | 404,599 | 535,961 |
| — | 149,532 | 3,845,650 | 0 | 0 |
| — | 17,275,310 | 17,498,203 | 519,576 | 626,834 |
| — | 22,982,665 | 23,476,214 | 805,075 | 858,508 |
| — | 21,544,753 | 22,087,681 | 685,932 | 803,920 |
| — | 9,157,550 | 9,308,967 | 340,360 | 400,170 |
| — | 41,140,680 | 41,977,996 | 1,264,629 | 1,484,958 |
| — | 9,962,765 | 9,978,456 | 308,691 | 357,200 |
| — | — | 2,119,329 | 0 | 0 |
| — | 24,643,800 | 25,204,446 | 898,003 | 908,647 |
| — | 14,308,000 | 14,425,754 | 376,578 | 469,103 |
| — | 27,152,760 | 27,599,423 | 851,551 | 1,046,220 |
| — | 24,800,360 | 25,312,488 | 822,517 | 970,112 |
| — | 16,260,620 | 16,277,694 | 547,898 | 547,898 |
| — | 20,080,530 | 20,614,672 | 744,400 | 798,147 |
| 326,300 | 6,087,220 | 6,545,959 | 435,779 | 518,881 |
| — | 22,489,984 | 22,808,322 | 661,173 | 720,431 |
| — | 11,638,350 | 12,025,325 | 621,542 | 624,974 |
| — | 6,853,100 | 6,940,648 | 85,775 | 90,529 |
| — | 17,435,032 | 17,709,634 | 756,027 | 810,372 |
| — | 24,555,000 | 24,877,714 | 896,000 | 1,013,684 |
| — | 13,770,430 | 13,866,823 | 433,500 | 579,852 |
| — | 21,526,330 | 21,900,674 | 658,300 | 831,437 |
| — | 28,342,995 | 29,330,040 | 795,441 | 938,619 |
| — | 20,435,463 | 20,435,463 | 711,876 | 711,876 |
| 20,000,000 | 22,972,678 | 44,978,892 | 1,300,468 | 1,509,664 |
| 29,901,200 | 3,939,650 | 35,878,583 | 1,177,040 | 1,220,333 |
| — | 25,760,600 | 26,199,689 | 756,667 | 894,264 |
| — | 22,044,860 | 22,573,386 | 646,840 | 777,115 |
| — | 21,499,340 | 22,074,985 | 674,184 | 731,586 |
| — | 259,247 | 25,099,074 | 636,718 | 767,831 |
| — | 44,963,350 | 45,947,733 | 1,317,468 | 1,427,618 |
| — | 3,559,600 | 8,350,004 | 0 | 0 |
| 22,185,800 | 340,200 | 23,904,637 | 940,542 | 1,086,101 |
| — | 8,485,170 | 8,684,147 | 273,339 | 273,339 |
| — | 14,454,740 | 14,562,747 | 486,524 | 557,607 |
| — | 10,792,672 | 11,062,759 | 416,800 | 477,692 |
| — | 153,180 | 157,893 | 11,467 | 12,211 |

# RESULTS OF SUGARCANE VARIETY TESTS IN LOUISIANA DURING 1959

*By R. J. Matherne,[1] T. J. Stafford,[2] and L. P. Hebert [1]*

The outfield agronomy sugarcane variety-testing program in Louisiana is conducted under a cooperative agreement between the Louisiana Agricultural Experiment Station, the U. S. Department of Agriculture Sugarcane Field Station at Houma, and the American Sugar Cane League. Experiments are located in representative areas throughout the sugarcane belt on the major soil types. Eleven of the 18 parishes growing sugarcane for sugar are represented. Table 1 gives the test field locations, owners, soil types, and dates of harvest.

Testing new and unreleased varieties, with the principal commercial varieties used as checks, is emphasized. Each year 6 or more new varieties are selected from variety tests of the Louisiana Sugar Experiment Station at Baton Rouge and the U. S. Department of Agriculture Sugarcane Field Station at Houma for inclusion in the outfield tests. Since the outfield yield trials are usually conducted with plant cane, first stubble, and second stubble crops, approximately 20 new and unreleased varieties are tested each year.

## Weather Conditions

Table 2 gives the monthly rainfall at each test field location during 1959. Heavy rains occurred in May over most of the sugar belt. Fields in general were very weedy, and in most cases the lay-by cultivation was never made. Because of this condition yields of plant cane on light soils were affected more than yields of stubble cane. In heavy soils both plant and stubble crop yields were reduced.

Freezes on November 7 and 18 damaged the cane so much that in many areas the terminal bud and about two thirds of the lateral eyes were killed. Since many growers had over half of the crop left in the field, there was considerable concern over the keeping qualities of the varieties. Harvesting priority was given to varieties most susceptible to deterioration after freeze damage. Because of their cold tolerance, N. Co. 310 and C. P. 44-101 were the varieties generally kept for late harvesting. N. Co. 310 is the more cold tolerant of the two. This procedure proved very successful in that practically the only losses incurred, even in the most northern area, resulted from lower topping.

## Experimental Technique

Randomized-block designs with 4 replications of each variety in 1/70-acre plots were used in each experiment. Regular plantation cultural and fertilizer practices of the cooperators were followed. The cane was cut with plantation labor and the trash was usually burned before weighing. When necessary to weigh the cane without burning, an adjustment was made for the amount of trash, with due consideration given to variety differences in trash content as determined in a large number of tests. A tractor-mounted weighing device was used to weigh the cane in all tests reported herein.

Twenty-stalk samples were taken at random from each plot after the cane was cut and piled in the heap row. These samples were transported to Houma for milling and juice analysis. A crusher-juice extraction of approximately 60 percent obtained when milling a variety like Co. 281 on station equipment compares with crusher juice of most Louisiana factories. Application of appropriate varietal correction factors for differences in milling extraction as determined in a large number of comparable tests makes it possible to arrive at a value for normal juice extraction and to calculate theoretical

Table 1. Testfield locations, soil types, and dates of harvest during 1959

| Testfield | Owner | Parish | Soil type | Harvest dates 1959 | | |
|---|---|---|---|---|---|---|
| | | | | Plant cane | First stubble | Second stubble |
| Billeaud | Billeaud-Reaux Planting Co. | Lafayette | Richland silt loam | 11/18 | 10/29 | ----- |
| Bon Secour | F. A. Graugnard & Sons | St. James | Mhoon silty clay loam | 11/23 | ----- | ----- |
| Cinclare light soil | H. L. Laws & Co. | East Baton Rouge | Mhoon very fine sandy loam | 12/1 | 12/2 | 10/21 |
| Cinclare heavy soil | H. L. Laws & Co. | East Baton Rouge | Sharkey clay | 11/12 | 11/17 | 11/12 |
| Glenwood | Thibaut Farms | Assumption | Mhoon very fine sandy loam | 11/23 | 11/5 | 10/16 |
| Greenwood | Southdown, Inc. | Lafourche | Sharkey clay | 11/16 | 10/26 | ----- |
| D. Landry | Dewey Landry | Iberia | Iberia silt loam | 11/30 | 11/5 | ----- |
| Oaklawn light soil | South Coast Corpn. | St. Mary | Baldwin silt loam | 12/1 | 11/9 | ----- |
| Oaklawn heavy soil | South Coast. Corpn. | St. Mary | Alligator clay | 12/2 | 11/10 | ----- |
| Raceland | South Coast Corpn. | Lafourche | Mhoon very fine sandy loam | 11/20 | 11/2 | 10/20 |
| Glendale | T. Lanaux & Sons | St. John | Commerce very fine sandy loam | 11/27 | ----- | ----- |
| Station (Houma) | U.S.Dept. Agri. | Terrebonne | Sharkey silty clay loam | 11/30 | 11/5 | ----- |
| St. John | Levert Land Co. | St. Marvin | Baldwin very fine sandy loam | 11/25 | 10/28 | ----- |
| Shirley | Haas Investment Company | Avoyelles | Yahola very fine sandy loam | 11/16 | 11/17 | 11/17 |
| Youngsville | Young's Industries Company | Lafayette | Richland silt loam | 11/17 | 11/11 | ----- |

Table 2. Monthly rainfall in inches at cooperative variety test stations during 1959

| tation | Jan. | Feb. | March | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| aceland | 2.09 | 8.97 | 4.10 | 2.44 | 20.20 | 6.80 | 12.71 | 5.00 | 4.59 | 6.71 | .87 | 2.27 | 76.75 |
| aklawn | 4.55 | 8.60 | 2.15 | 2.60 | 11.75 | 3.85 | 12.25 | 7.30 | 2.55 | 5.50 | .40 | 3.15 | 64.65 |
| . Landry 1/ | 4.32 | 10.81 | 2.27 | 3.02 | 6.56 | 8.87 | 6.14 | 3.43 | 5.07 | 5.87 | 1.32 | 1.97 | 59.65 |
| t. John | 4.34 | 10.95 | 3.08 | 2.40 | 9.45 | 7.00 | 9.20 | 3.27 | 6.70 | 4.20 | 1.95 | 7.10 | 69.64 |
| on Secour | 2.98 | 13.13 | 2.01 | 2.37 | 12.30 | 4.48 | 7.17 | 4.57 | 1.07 | 5.94 | 2.02 | 3.94 | 61.98 |
| reenwood | 2.55 | 10.15 | 2.10 | 3.50 | 12.25 | 5.90 | 11.30 | 3.85 | 3.10 | 5.60 | .70 | 3.80 | 64.80 |
| hirley 2/ | 4.10 | 7.40 | 2.82 | 10.00 | 4.68 | 4.27 | 5.47 | 6.70 | 2.09 | 4.04 | 2.74 | 8.00 | 62.31 |
| inclare | 5.00 | 10.06 | 2.81 | 3.07 | 11.06 | 3.55 | 20.18 | 5.42 | 2.54 | 5.51 | 1.09 | 5.51 | 75.80 |
| lenwood | 3.55 | 9.78 | 2.12 | 2.40 | 17.55 | 3.20 | 12.23 | 7.77 | 2.43 | 5.92 | 2.20 | 4.82 | 73.97 |
| anaux 3/ | 3.20 | 12.09 | 2.55 | 3.43 | 10.81 | 10.21 | 15.02 | 6.25 | 1.19 | 6.51 | 1.90 | 2.51 | 75.67 |
| oungsville | 4.10 | 11.45 | 2.30 | 2.79 | 6.67 | 5.20 | 7.90 | 2.63 | 1.35 | 8.46 | 2.54 | 3.87 | 59.26 |
| illeaud | 4.52 | 11.33 | 1.86 | 3.45 | 7.29 | 3.96 | 9.88 | 4.27 | 4.88 | 6.37 | 3.01 | 4.60 | 65.42 |

1/ Rainfall recorded at nearby Iberia Livestock Farm.

2/ " " " " H. K. Bubenzer Farms, Inc.

3/ " " " " Reserve, La.

sugar yields in accordance with the Winter-Carp-Geerligs formula. Arceneaux's simplification of this formula makes routine calculation of theoretical sugar yields easy and rapid (2). Although actual values obtained may not always be in agreement with actual commercial recoveries, it is believed that the relative values are reliable in evaluating variety performance, and that corrections for differences in normal juice obtained with the different varieties make it possible to appraise the relative theoretical sugar yields of each variety much more critically. For example, with the same crusher-juice analysis, C. P. 44-101, with a varietal correction factor of 1.00, would be expected to yield approximately 4 percent more sugar per ton of cane than C. P. 36-105, which has a varietal correction factor of .96.

Extraction values and fiber percentages obtained with highly comparable material in carefully con-

Table 3. Summary of tests with sugarcane varieties on light soils during 1959 showing averages of all locations.

| Variety | Crop (N) | Tons of cane per acre | Pounds sugar per ton of cane 1/ | Sugar per acre | |
|---|---|---|---|---|---|
| | | | | Pounds | Percent of C.P. 44-101* |
| C. P. 55-14 | Plant cane (9) | 26.74 | 184.0 | 4920 | 106 |
| C. P. 51-21 | Plant cane (6) | 23.94 | 189.9 | 4546 | 109 |
| | First stubble (5) | 27.34 | 191.2 | 5227 | 109 |
| | Avg. 2 crops (11) | 25.49 | 190.6 | 4858 | 109 |
| C. P. 53-1 | Plant cane (10) | 27.42 | 174.2 | 4777 | 107 |
| | First stubble (9) | 28.65 | 170.9 | 4896 | 96 |
| | Avg. 2 crops (19) | 28.00 | 172.6 | 4833 | 102 |
| C. P. 44-101 | Plant cane (11) | 26.69 | 168.5 | 4497 | 100 |
| | First stubble (9) | 31.35 | 162.6 | 5098 | 100 |
| | Second stubble (4) | 29.78 | 148.5 | 4422 | 100 |
| | Avg. 3 crops (24) | 28.95 | 162.7 | 4710 | 100 |
| C. P. 55-30 | Plant cane (9) | 26.93 | 173.6 | 4675 | 101 |
| C. P. 48-103 | Plant cane (10) | 21.50 | 214.8 | 4618 | 102 |
| | First stubble (8) | 22.33 | 213.1 | 4758 | 94 |
| | Second stubble (4) | 21.78 | 201.1 | 4380 | 99 |
| | Avg. 3 crops (22) | 21.85 | 213.2 | 4685 | 99 |
| C. P. 52-68 | Plant cane (11) | 24.58 | 186.4 | 4582 | 102 |
| | First stubble (9) | 25.64 | 182.6 | 4682 | 92 |
| | Second stubble (4) | 26.41 | 171.0 | 4516 | 102 |
| | Avg. 3 crops (24) | 25.28 | 182.3 | 4609 | 98 |
| C. P. 55-22 | Plant cane (9) | 27.01 | 168.5 | 4551 | 98 |
| C. P. 53-22 | Plant cane (8) | 28.20 | 159.0 | 4484 | 101 |
| | First stubble (7) | 31.08 | 145.6 | 4525 | 83 |
| | Avg. 2 crops (15) | 29.54 | 152.4 | 4502 | 92 |
| C. P. 36-105 | Plant cane (10) | 27.42 | 165.4 | 4535 | 101 |
| | First stubble (8) | 29.18 | 157.8 | 4605 | 91 |
| | Second stubble (4) | 24.61 | 153.7 | 3783 | 85 |
| | Avg. 3 crops (22) | 27.55 | 160.6 | 4424 | 94 |
| N. Co. 310 | Plant cane (11) | 26.72 | 177.1 | 4732 | 105 |
| | First stubble (9) | 27.25 | 155.5 | 4237 | 83 |
| | Second stubble (4) | 25.23 | 144.3 | 3641 | 82 |
| | Avg. 3 crops (24) | 26.67 | 163.6 | 4363 | 93 |
| C. P. 55-15 | Plant Cane (9) | 21.35 | 195.6 | 4176 | 90 |
| C. P. 55-37 | Plant cane (9) | 25.18 | 164.0 | 4130 | 89 |
| C. P. 47-193 | Plant cane (8) | 21.80 | 171.6 | 3741 | 78 |
| | First stubble (8) | 25.66 | 168.6 | 4326 | 85 |
| | Second stubble (4) | 23.72 | 158.4 | 3757 | 85 |
| | Avg. 3 crops (20) | 23.73 | 167.7 | 3979 | 82 |

* Percentage values based on yields in comparable tests.

1/ Weighted average in this and subsequent tables.

(N) = Number of tests.

Table 4. Results of sugarcane variety tests on light soils in the Mississippi River-Bayou Lafourche area during 1959 (Tons of cane per acre)

| Variety | Plant Cane | | | | | First Stubble | | | | Second Stubble | | | | Average of all tests* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Bon Secour | Clo-clare | Glen-wood | Lamaux | Race-land | Avg. | Clo-clare | Glen-wood | Race-land | Avg. | Clo-clare | Glen-wood | Race-land | Avg. | |
| C. P. 52-22 | ----- | ----- | ----- | 33.58 | 31.92 | 32.75 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 31.35 |
| C. P. 52-20 | 30.16 | 25.96 | 28.65 | ----- | 29.23 | 28.58 | ----- | ----- | ----- | 28.55 | 28.55 | ----- | ----- | ----- | 28.58 |
| C. P. 52-14 | 28.06 | 29.50 | 29.05 | ----- | 27.42 | 28.46 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 27.03 |
| C. P. 51-21 | ----- | 28.62 | 27.44 | 20.90 | ----- | 24.26 | 21.80 | 20.39 | ----- | 21.10 | ----- | ----- | ----- | ----- | 27.36 |
| C. P. 52-22 | 28.70 | 27.64 | 27.75 | ----- | 26.19 | 27.57 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 27.37 |
| C. P. 52-1 | ----- | 27.67 | 29.36 | 31.27 | 28.80 | 29.28 | 17.43 | 22.06 | 28.03 | 22.51 | ----- | ----- | ----- | ----- | 26.37 |
| C. P. 44-101 | 29.76 | 26.55 | 28.55 | 28.33 | 30.98 | 28.83 | 17.98 | 24.38 | 29.99 | 23.98 | 30.07 | ----- | 26.94 | 29.09 | 27.58 |
| C. P. 52-15 | 24.34 | 21.78 | 17.86 | ----- | 24.18 | 22.09 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 22.09 |
| C. P. 52-68 | 26.36 | 24.65 | 28.23 | 27.04 | 23.73 | 26.06 | 17.87 | 16.10 | 26.00 | 19.99 | 26.13 | 23.18 | 22.87 | 24.73 | 24.03 |
| C. P. 52-57 | 23.97 | 26.73 | 22.40 | ----- | 29.12 | 26.06 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 26.06 |
| C. P. 36-105 | 25.10 | 25.17 | 20.46 | 20.80 | 23.04 | 22.39 | 17.84 | 20.64 | 26.52 | 21.66 | 20.38 | 22.88 | 24.86 | 22.71 | 22.12 |
| C. P. 48-103 | 24.10 | 25.03 | 29.04 | 24.06 | 23.98 | 25.28 | 11.98 | 12.74 | 21.34 | 15.35 | 20.38 | 16.51 | 20.06 | 19.65 | 23.70 |
| N. Co. 310 | 26.16 | 25.60 | 27.30 | 26.93 | 26.64 | 26.61 | 15.10 | 21.37 | 27.23 | 21.23 | 24.61 | 22.78 | 22.91 | 23.43 | 24.30 |
| C. P. 43-47 | ----- | 22.51 | 29.04 | 21.34 | ----- | 24.30 | 18.37 | 15.39 | 24.10 | 19.29 | 24.00 | 23.50 | 19.46 | 22.32 | 21.97 |
| C. P. 44-155 | ----- | 19.86 | 23.93 | 27.50 | ----- | 23.76 | 13.69 | 13.69 | 24.80 | 17.39 | 24.02 | 21.97 | 21.91 | 22.63 | 21.26 |
| C. P. 47-193 | 21.36 | 22.87 | 20.78 | 21.98 | 19.40 | 21.37 | 13.73 | 15.89 | 23.62 | 18.41 | 24.16 | 21.18 | 21.94 | 22.43 | 20.83 |
| C. P. 52-16 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 23.65 | 21.78 | 23.75 | 23.06 | 23.06 |
| C. P. 53-15 | ----- | ----- | ----- | ----- | ----- | ----- | 18.56 | 17.21 | 24.34 | 20.02 | 18.34 | 17.41 | 23.10 | 19.62 | 19.62 |
| C. P. 48-117 | ----- | ----- | ----- | ----- | ----- | ----- | 11.64 | 14.30 | 20.76 | 15.57 | ----- | ----- | ----- | ----- | 15.57 |
| C. P. 53-16 | ----- | ----- | ----- | ----- | ----- | ----- | 5.80 | 9.65 | 16.89 | 10.78 | ----- | ----- | ----- | ----- | 10.78 |
| C. P. 53-18 | ----- | ----- | ----- | ----- | ----- | ----- | 11.64 | 11.23 | 16.72 | 13.20 | 19.77 | ----- | 15.56 | 16.94 | 15.07 |
| C. P. 52-57 | ----- | ----- | ----- | ----- | ----- | ----- | 9.28 | 9.66 | 18.76 | 12.57 | 13.52 | 11.12 | 13.16 | 12.60 | 15.26 |
| C. P. 29-116 | ----- | ----- | ----- | 31.34 | ----- | 31.34 | 6.21 | 7.85 | 15.97 | 10.01 | ----- | ----- | ----- | ----- | 10.01 |
| C. P. 53-23 | ----- | ----- | ----- | ----- | ----- | ----- | 5.92 | 4.62 | ----- | 5.27 | 12.49 | 13.40 | 10.16 | 12.02 | 11.15 |
| C. P. 29-320 | ----- | ----- | ----- | 20.31 | ----- | 20.31 | 6.24 | 10.25 | 12.06 | 9.52 | 5.70 | 10.98 | 16.21 | 10.96 | 10.24 |
| C. P. 52-67 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| L.S.D. (.05) | 2.93 | 2.86 | 3.24 | 3.97 | 3.63 | | 4.01 | 4.43 | 4.64 | | 3.10 | 3.31 | 3.74 | | |
| L.S.D. (.01) | 3.98 | 3.87 | 4.33 | 4.79 | 4.86 | | 5.34 | 5.90 | 6.19 | | 4.18 | 4.43 | 5.03 | | |

*Simple average. Not adjusted for missing plot values in this and subsequent tables.

Table 5. Results of sugarcane variety tests on light soil in the Mississippi River-Bayou Lafourche area during 1959 (Pounds of sugar per ton of cane)

| Variety | Plant Cane | | | | | First Stubble | | | | Second Stubble | | | | Average of all tests |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Bon Secour | Clo-clare | Glen-wood | Lamaux | Race-land | Avg. | Clo-clare | Glen-wood | Race-land | Avg. | Clo-clare | Glen-wood | Race-land | Avg. | |
| C. P. 52-22 | ----- | ----- | ----- | 137.3 | 182.0 | 159.1 | ----- | ----- | ----- | 169.0 | ----- | ----- | ----- | ----- | 162.1 |
| C. P. 52-20 | 174.5 | 170.2 | 163.7 | ----- | 186.5 | 173.9 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 173.9 |
| C. P. 52-14 | 190.9 | 163.4 | 179.1 | ----- | 183.2 | 178.8 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 178.8 |
| C. P. 51-21 | ----- | 204.3 | 181.0 | 188.0 | ----- | 191.2 | 221.6 | 232.6 | ----- | 228.9 | ----- | ----- | ----- | ----- | 204.1 |
| C. P. 52-22 | 184.4 | 161.1 | 149.7 | ----- | 191.5 | 171.5 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 171.5 |
| C. P. 52-1 | ----- | 171.1 | 174.6 | 190.3 | 191.3 | 181.4 | 191.9 | 204.5 | 176.7 | 190.2 | ----- | ----- | ----- | ----- | 178.3 |
| C. P. 44-101 | 149.1 | 157.6 | 174.9 | 158.3 | 171.9 | 165.8 | 210.9 | 188.5 | 164.4 | 176.2 | 146.6 | 155.7 | 151.6 | 151.3 | 164.6 |
| C. P. 52-15 | 203.2 | 208.4 | 189.1 | ----- | 210.9 | 204.1 | 202.4 | 207.6 | 193.4 | 199.9 | 177.3 | 177.1 | 173.8 | 176.8 | 184.6 |
| C. P. 52-68 | 189.6 | 174.6 | 169.6 | 176.8 | 202.1 | 182.1 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 182.1 |
| C. P. 52-57 | 176.2 | 161.4 | 158.4 | ----- | 178.1 | 169.1 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 169.1 |
| C. P. 36-105 | 182.1 | 166.7 | 155.2 | 160.7 | 177.4 | 168.4 | 178.9 | 199.0 | 168.4 | 181.0 | 174.0 | 151.8 | 181.7 | 169.3 | 171.5 |
| C. P. 48-103 | 211.0 | 226.7 | 208.6 | 206.5 | 236.0 | 217.9 | 218.1 | 238.4 | 229.4 | 229.0 | 205.8 | 192.6 | 200.4 | 200.3 | 215.5 |
| N. Co. 310 | 174.9 | 179.8 | 198.8 | 175.9 | 193.6 | 184.4 | 213.7 | 203.1 | 176.1 | 194.1 | 141.0 | 173.9 | 134.2 | 155.8 | 178.9 |
| C. P. 43-47 | ----- | 156.2 | 173.1 | 157.3 | ----- | 162.4 | 168.0 | 200.7 | 182.1 | 183.7 | 159.9 | 163.0 | 138.2 | 160.2 | 169.6 |
| C. P. 44-155 | ----- | 168.4 | 176.2 | 154.2 | ----- | 166.3 | 190.2 | 196.2 | 190.7 | 192.4 | 156.6 | 172.4 | 140.1 | 156.4 | 170.0 |
| C. P. 47-193 | 167.1 | 172.6 | 159.2 | 172.2 | 194.0 | 172.7 | 182.8 | 187.3 | 188.5 | 186.2 | 163.0 | 176.2 | 165.8 | 168.3 | 173.9 |
| C. P. 52-16 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 156.1 | 176.2 | 165.8 | 166.0 | 174.3 |
| C. P. 53-15 | ----- | ----- | ----- | ----- | ----- | ----- | 173.6 | 186.0 | 172.9 | 176.9 | 153.7 | 148.8 | 157.8 | 153.6 | 176.9 |
| C. P. 48-117 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 140.4 |
| C. P. 53-16 | ----- | ----- | ----- | ----- | ----- | ----- | 162.9 | 172.0 | 161.2 | 164.9 | ----- | ----- | ----- | ----- | 164.9 |
| C. P. 53-18 | ----- | ----- | ----- | ----- | ----- | ----- | 217.3 | 232.6 | 218.3 | 222.4 | 197.1 | 176.8 | 180.6 | 149.1 | 222.4 |
| C. P. 52-57 | ----- | ----- | ----- | ----- | ----- | ----- | 214.2 | 165.6 | 170.3 | 183.4 | 157.5 | 140.8 | 133.0 | 137.0 | 180.6 |
| C. P. 29-116 | ----- | ----- | ----- | 150.1 | ----- | 150.1 | 154.1 | 189.7 | 190.6 | 184.7 | 171.8 | ----- | ----- | ----- | 184.7 |
| C. P. 53-23 | ----- | ----- | ----- | ----- | ----- | ----- | 163.8 | 173.1 | 167.9 | 162.1 | 165.8 | 165.8 | 164.5 | 164.7 | 164.7 |
| C. P. 29-320 | ----- | ----- | ----- | 163.2 | ----- | 163.2 | 140.4 | 161.7 | 177.0 | 163.5 | 132.8 | 118.6 | 138.2 | 130.7 | 146.0 |
| C. P. 52-67 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| L.S.D. (.05) | 14.8 | 22.9 | 17.2 | 16.9 | 16.9 | | 23.1 | 17.2 | 15.5 | | 20.0 | 18.0 | 19.6 | | |
| L.S.D. (.01) | 20.0 | 30.9 | 23.4 | 22.7 | 22.6 | | 30.7 | 22.9 | 20.6 | | 27.0 | 24.2 | 26.2 | | |

trolled small-mill trials are in good agreement with those of factory tests. The 1956 report pointed out that C. P. 51-21 was probably too high in fiber for commercial utilization, although it was early maturing and its juice was high in sucrose and purity (6). Recent tests at the Audubon Sugar Factory confirmed results of earlier trials (3).

## Tests on Light Soils

Tables 4-10 give the results of all tests on light soil by areas during 1959 and table 3 summarizes results for 6 released varieties and 8 unreleased varieties. Only plant cane results were available for some of the most recent introductions. There were 24 individual tests on light soils in which C. P. 44-101, C. P. 52-68 and N. Co. 310 were compared and 22 in which C. P. 44-101, C. P. 48-103 and C. P. 36-105 occurred in comparable tests. In the average of all of these, C. P. 44-101 produced more sugar per acre than the other 4 varieties, but each one outyielded C. P. 44-101 in plant cane. C. P. 52-68 surpassed C. P. 44-101 in 12 of the tests but produced less sugar per acre than that variety in 12 of the 24 individual tests in which the 2 varieties were compared. Its juice was higher in sucrose than juice of C. P. 44-101 in every test. N. Co. 310 outyielded C. P. 44-101 by 5 percent in plant cane but was considerably below it in first stubble and second stubble.

Table 6. Results of sugarcane variety tests on light soils in the Mississippi River-Bayou Lafourche area during 1939 (Pounds of sugar per acre)

| Variety | Plant Cane | | | | | | First Stubble | | | | Second Stubble | | | Average of all tests |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Bon Secour | Cinclare | Glenwood | Lamaux | Raceland | Avg. | Cinclare | Glenwood | Raceland | Avg. | Cinclare | Glenwood | Raceland | Avg. | |
| C. P. 53-22 | ----- | ----- | ----- | 4611 | 5809 | 5210 | ----- | ----- | 4826 | 4826 | ----- | ----- | ----- | ----- | 5082 |
| C. P. 55-30 | 5264 | 4418 | 4690 | ---- | 5506 | 4970 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 4970 |
| C. P. 55-14 | 5357 | 4837 | 4486 | ---- | 4657 | 4834 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 4834 |
| C. P. 51-21 | ---- | 5363 | 4967 | 3929 | ---- | 4753 | 4831 | 4743 | ----- | 4787 | ----- | ----- | ----- | ----- | 4768 |
| C. P. 55-22 | 5291 | 4453 | 4154 | ---- | 5015 | 4728 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 4728 |
| C. P. 53-1 | ----- | 4734 | 5126 | 4700 | 5910 | 5019 | 3380 | 4711 | 4934 | 4281 | ----- | ----- | ----- | ----- | 4702 |
| C. P. 44-101 | 5041 | 4105 | 4736 | 4485 | 5521 | 4760 | 3244 | 4296 | 4984 | 4273 | 4408 | 4713 | 4085 | 4401 | 4540 |
| C. P. 53-18 | 4981 | 4178 | 4788 | ---- | 4754 | 4478 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 4208 |
| C. P. 52-68 | 5027 | 4304 | 4783 | 4781 | 4794 | 4738 | 3617 | 3342 | 5028 | 3996 | 4633 | 4459 | 4021 | 4372 | 4436 |
| C. P. 55-37 | 4575 | 4314 | 3548 | ---- | 5186 | 4406 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 4406 |
| C. P. 36-105 | 5270 | 4696 | 4651 | 4950 | 5506 | 5015 | 3192 | 4107 | 4463 | 3920 | 3546 | 3473 | 4316 | 3845 | 4397 |
| C. P. 48-103 | 5085 | 5668 | 4251 | 4962 | 5409 | 5075 | 2593 | 3044 | 4896 | 3511 | 4606 | 3180 | 4019 | 3936 | 4336 |
| N. Co. 310 | 4575 | 4619 | 4978 | 4936 | 5158 | 4853 | 4107 | 2642 | 4299 | 3670 | 3546 | 3961 | 3973 | 3693 | 4215 |
| C. P. 43-47 | ---- | 3999 | 4726 | 4236 | ---- | 4321 | 2839 | 4289 | 4999 | 4027 | 3967 | 3734 | 4349 | 4016 | 4121 |
| C. P. 44-155 | ---- | 3890 | 5349 | 3611 | ---- | 4284 | 3411 | 3164 | 4342 | 3640 | 4022 | 3887 | 2926 | 3611 | 3845 |
| C. P. 49-116 | ---- | 3344 | 4216 | 4212 | ---- | 3957 | 2605 | 2685 | 4953 | 3414 | 4247 | 3796 | 3572 | 3872 | 3740 |
| C. P. 47-193 | 3622 | 3947 | 3508 | 3785 | 3764 | 3662 | 2510 | 2979 | 4830 | 3439 | 3936 | 3206 | 3866 | 3719 | 3627 |
| C. P. 52-16 | ---- | ---- | ---- | ---- | ---- | ---- | 876 | 1697 | 2135 | 1569 | 4868 | 757 | 1302 | 2241 | 1432 | 3542 |
| C. P. 53-15 | ---- | ---- | ---- | ---- | ---- | ---- | 3212 | 3201 | 4209 | 3541 | ----- | ----- | ----- | ----- | ----- | 3541 |
| C. P. 48-117 | ---- | ---- | ---- | ---- | ---- | ---- | ----- | ----- | ----- | ----- | 2421 | 2338 | 3503 | 2755 | ----- | 2755 |
| C. P. 53-16 | ---- | ---- | ---- | ---- | ---- | ---- | 1896 | 2460 | 3347 | 2568 | ----- | ----- | ----- | ----- | ----- | 2568 |
| C. P. 53-18 | ---- | ---- | ---- | ---- | ---- | ---- | 1260 | 2245 | 3687 | 2397 | ----- | ----- | ----- | ----- | ----- | 2397 |
| C. P. 52-57 | ---- | ---- | ---- | ---- | ---- | ---- | 1876 | 1760 | 2931 | 2223 | 3114 | 2105 | 2399 | 2526 | ----- | 2526 |
| C. P. 49-116 | ---- | ---- | ---- | ---- | ---- | ---- | 1452 | 1996 | 3190 | 2080 | 1863 | 1566 | 1750 | 1726 | ----- | 2303 |
| C. P. 47-193 | ---- | ---- | ---- | ---- | ---- | ---- | 1178 | 1496 | 2874 | 1849 | ----- | ----- | ----- | ----- | ----- | 1849 |
| C. P. 53-23 | ---- | ---- | ---- | ---- | ---- | ---- | 1300 | 1845 | ----- | 1572 | 2025 | 1222 | 1645 | 1973 | ----- | 1836 |
| C. P. 52-67 | ---- | ---- | ---- | ---- | ---- | ---- | 876 | 1697 | 2135 | 1569 | 4868 | 757 | 1302 | 2241 | 1432 | 1499 |
| L.S.D. (.05) | 753 | 635 | 716 | 758 | 885 | | 766 | 810 | 897 | | 560 | 573 | 643 | | | |
| L.S.D. (.01) | 1015 | 857 | 957 | 1013 | 1187 | | 1020 | 1079 | 1143 | | 754 | 767 | 866 | | | |

Table 7. Results of sugarcane variety tests on light soils in the Bayou Teche-Lafayette area during 1939 (Tons of cane per acre)

| Variety | Plant Cane | | | | | | First Stubble | | | | Average of all tests |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Bilbao | Iowa | Jeff. Davis | Lafayette | Arnaud | Avg. | Bilbao | Iowa | Jeff. Davis | Lafayette | Arnaud Avg. |
| C. P. 51-24 | ----- | ----- | ----- | ----- | ----- | ----- | 29.70 | 28.26 | ----- | ----- | ----- | 28.98 | 28.98 |
| C. P. 53-18 | ----- | ----- | ----- | ----- | ----- | ----- | 25.97 | 23.02 | ----- | ----- | ----- | 23.24 | 23.24 |
| C. P. 53-1 | 17.41 | 25.47 | 34.28 | 25.34 | 23.82 | 25.26 | 31.81 | 31.11 | 39.53 | 26.26 | 28.60 | 31.86 | 28.56 |
| C. P. 51-21 | 16.99 | 23.98 | ----- | ----- | ----- | 20.48 | 25.08 | 29.47 | 22.80 | ----- | ----- | 25.11 | 25.81 |
| C. P. 55-14 | ----- | 24.37 | 30.09 | 26.08 | 19.80 | 25.08 | ----- | ----- | ----- | ----- | ----- | ----- | 25.08 |
| C. P. 44-101 | 17.96 | 21.80 | 29.89 | 24.92 | 23.67 | 23.65 | 38.18 | 35.16 | 38.91 | 29.90 | 32.11 | 34.85 | 29.28 |
| C. P. 36-13 | 16.44 | 18.71 | ----- | ----- | ----- | 17.58 | 30.30 | 35.08 | 36.25 | ----- | 27.42 | 32.26 | 27.37 |
| C. P. 43-47 | 17.86 | 22.28 | ----- | ----- | ----- | 20.07 | 29.64 | 33.52 | 37.84 | ----- | 29.72 | 32.68 | 28.48 |
| C. P. 52-68 | 16.43 | 18.80 | 31.04 | 22.48 | 22.84 | 22.32 | 29.69 | 28.75 | 38.64 | 18.66 | 25.28 | 28.20 | 25.26 |
| C. P. 44-155 | ----- | ----- | 22.34 | ----- | 18.15 | 20.24 | 29.63 | 32.06 | 32.41 | ----- | 25.96 | 30.02 | 26.76 |
| C. P. 47-193 | 18.17 | 25.18 | 32.88 | 25.96 | 26.95 | 25.83 | 33.19 | 33.22 | 40.19 | 24.21 | 27.99 | 31.68 | 28.75 |
| N. Co. 310 | 16.42 | 19.06 | 24.47 | ----- | 22.06 | 20.54 | 28.01 | 32.29 | 38.44 | ----- | 29.20 | 31.98 | 27.26 |
| C. P. 48-103 | 13.86 | 17.01 | 32.64 | ----- | 22.06 | 21.85 | 32.29 | 28.46 | 39.70 | ----- | 29.20 | 32.55 | 27.68 |
| C. P. 36-105 | 15.54 | 25.87 | ----- | ----- | ----- | 20.71 | 28.03 | 33.99 | 37.76 | 24.37 | 31.37 | 33.28 | 28.66 |
| C. P. 52-22 | 20.39 | 27.23 | 29.63 | 25.04 | 24.16 | 25.29 | 38.18 | 37.76 | 34.33 | 23.96 | 28.14 | 32.47 | 28.67 |
| C. P. 53-15 | ----- | ----- | ----- | ----- | ----- | ----- | 28.49 | 26.66 | 32.16 | 24.36 | 27.31 | 27.80 | 27.80 |
| C. P. 55-30 | ----- | 23.29 | 28.50 | 26.33 | 17.93 | 24.01 | ----- | ----- | ----- | ----- | ----- | ----- | 24.01 |
| C. P. 55-22 | ----- | 21.50 | 28.71 | 26.40 | 22.52 | 24.78 | ----- | ----- | ----- | ----- | ----- | ----- | 24.78 |
| C. P. 44-155 | 12.60 | 14.00 | ----- | ----- | ----- | 13.30 | 30.52 | 23.63 | 34.04 | ----- | 25.76 | 28.99 | 23.76 |
| C. P. 55-15 | ----- | 20.66 | 25.10 | 21.21 | 13.41 | 20.10 | ----- | ----- | ----- | ----- | ----- | ----- | 20.10 |
| C. P. 49-116 | 15.92 | 25.23 | ----- | ----- | ----- | 20.58 | 34.27 | 29.20 | 32.77 | ----- | 27.03 | 32.34 | 28.42 |
| C. P. 53-23 | ----- | ----- | ----- | ----- | ----- | ----- | 27.28 | 27.15 | 26.09 | 14.76 | 23.20 | 23.29 | 23.29 |
| C. P. 52-58 | ----- | ----- | ----- | ----- | ----- | ----- | 28.13 | 30.25 | ----- | ----- | ----- | 29.24 | 29.24 |
| C. P. 52-9 | ----- | ----- | ----- | ----- | ----- | ----- | 28.35 | 30.20 | ----- | ----- | ----- | 29.28 | 29.28 |
| C. P. 52-57 | ----- | ----- | ----- | ----- | ----- | ----- | 30.22 | 26.74 | 31.08 | ----- | 20.55 | 27.15 | 27.13 |
| C. P. 55-37 | ----- | 19.11 | 28.53 | 24.46 | 21.03 | 23.28 | ----- | ----- | ----- | ----- | ----- | ----- | 23.28 |
| C. P. 55-23 | ----- | 23.96 | ----- | ----- | ----- | 23.96 | 25.07 | 26.04 | 24.17 | 20.69 | 24.12 | 24.02 | 23.96 |
| C. P. 53-16 | ----- | ----- | ----- | ----- | ----- | ----- | 31.92 | 27.20 | 28.77 | 12.84 | 17.72 | 23.95 | 24.02 |
| C. P. 44-154 | 18.49 | ----- | ----- | ----- | ----- | 18.49 | 27.20 | 26.22 | ----- | ----- | ----- | 26.71 | 26.20 |
| C. P. 52-67 | 16.14 | 22.95 | ----- | ----- | ----- | 19.54 | 29.14 | 29.24 | 32.13 | ----- | ----- | 30.17 | 26.19 |
| Co. 290 | ----- | 25.07 | ----- | ----- | ----- | 25.07 | ----- | ----- | 34.18 | ----- | ----- | 34.18 | 29.62 |
| C. P. 36-111 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| L.S.D. (.05) | N.S. | 3.75 | 4.31 | 3.58 | 3.27 | | 4.14 | 3.20 | 5.11 | 2.56 | 2.73 | | |
| L.S.D. (.01) | N.S. | 5.00 | 5.85 | 4.83 | 4.40 | | 5.54 | 4.25 | 6.86 | 3.47 | 3.64 | | |

For the second consecutive year N. Co. 310 yielded below its previous 5-year average. The 20 comparisons between C. P. 47-193 and C. P. 44-101 show that C. P. 44-101 surpassed the former variety by a wide margin in both plant cane and stubble. In no tests did C. P. 47-193 equal C. P. 44-101 in yields of sugar per acre.

C. P. 53-1 averaged 107 and 96 percent of C. P. 44-101 in plant cane and first stubble, respectively, with an average value of 102 percent for the average of all 19 comparisons. In 11 plant cane and first stubble tests, C. P. 51-21 surpassed C. P. 44-101 by 9 percent in yield of sugar per acre. C. P. 55-14 and C. P. 55-30, occurring in plant cane tests only, produced 6 and 1 percent more sugar per acre, respectively, than C. P. 44-101. C. P. 53-22 produced more sugar per acre than C. P. 44-101 in plant cane and considerably less than that variety in first stubble. It yielded relatively low amounts of sugar per ton of cane. C. P. 55-15, C. P. 55-37, and C. P. 55-22 were tested in plant cane crops only. C. P. 55-22 compared favorably with C. P. 44-101 in both sugar per ton and sugar per acre in the 9 comparisons of the 2 varieties.

## Tests on Heavy Soils

A summary of results of all tests on heavy soils is given in table 11, and the information on each individual test is presented in tables 12, 13 and 14. There were 4 plant cane tests, 3 first stubble and 1 second stubble tests. Two of the commer-

Table 8. Results of sugarcane variety tests on light soils in the Bayou Teche-Lafayette area during 1959 (Pounds of sugar per ton of cane)

| Variety | Plant Cane | | | | | First Stubble | | | | | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Billeaud | Youngerville | St. John D. Landry | Oaklawn | Average | Billeaud | Youngerville | St. John D. Landry | Oaklawn | Average | all crops |
| C. P. 51-24 | ----- | ----- | ----- | ----- | ----- | 193.2 | 191.4 | ----- | ----- | ----- | 192.3 |
| C. P. 53-18 | ----- | ----- | ----- | ----- | ----- | 198.3 | 210.2 | ----- | ----- | ----- | 204.3 |
| C. P. 53-1 | 206.9 | 172.6 | 180.0 | 182.4 | 185.3 | 183.7 | 181.4 | 140.1 | 183.2 | 222.1 | 193.4 |
| C. P. 51-21 | 211.6 | 218.5 | ----- | ----- | 215.6 | 163.7 | 191.3 | ----- | ----- | ----- | 178.2 |
| C. P. 55-14 | ----- | 202.8 | 198.3 | 181.5 | 197.2 | ----- | ----- | ----- | ----- | ----- | ----- |
| C. P. 44-101 | 178.3 | 165.7 | 183.9 | 174.9 | 175.4 | 143.3 | 169.7 | 142.0 | 173.4 | 194.1 | 162.9 |
| C. P. 36-13 | 182.5 | 174.1 | ----- | ----- | 178.0 | 155.5 | 179.2 | 199.4 | ----- | 208.8 | 174.4 |
| C. P. 43-47 | 188.4 | 156.7 | 202.3 | 197.7 | 187.2 | 168.0 | 190.4 | 149.7 | ----- | 205.7 | 166.8 |
| C. P. 52-68 | 207.4 | 185.2 | 202.3 | ----- | 196.2 | 164.1 | 180.9 | 199.7 | 202.1 | 217.2 | 187.6 |
| C. P. 47-193 | ----- | ----- | 196.1 | 159.2 | 174.9 | 186.6 | 177.3 | 156.8 | 155.0 | 205.4 | 175.6 |
| M. Co. 310 | 201.2 | 178.6 | 180.6 | ----- | 187.2 | 168.2 | 208.3 | 196.3 | 149.8 | 240.3 | 184.2 |
| C. P. 48-103 | 214.6 | 164.4 | 171.1 | ----- | 183.4 | 210.3 | 208.5 | 155.5 | ----- | 204.0 | 181.1 |
| C. P. 36-105 | 165.3 | 171.1 | ----- | ----- | 172.3 | 169.6 | 149.1 | 132.6 | ----- | 204.0 | 156.4 |
| C. P. 53-22 | 170.9 | 173.4 | 178.0 | 172.6 | 168.1 | 138.9 | 155.0 | 122.5 | 158.2 | 187.5 | 150.5 |
| C. P. 53-13 | ----- | ----- | ----- | ----- | ----- | 139.7 | 158.7 | 138.5 | 186.6 | 195.1 | 162.2 |
| C. P. 55-30 | ----- | 182.6 | 174.7 | 178.1 | 183.1 | ----- | ----- | ----- | ----- | ----- | ----- |
| C. P. 55-22 | 197.0 | 203.6 | 160.0 | 156.5 | 175.0 | ----- | ----- | ----- | ----- | 208.9 | 163.2 |
| C. P. 44-155 | 194.6 | 184.5 | ----- | ----- | 188.3 | 136.7 | 171.9 | 145.9 | ----- | ----- | 167.9 |
| C. P. 55-15 | 174.8 | 182.5 | 218.3 | 197.4 | 197.9 | ----- | ----- | ----- | ----- | ----- | 197.9 |
| C. P. 29-116 | 163.2 | 141.2 | ----- | ----- | 149.7 | 112.8 | 130.7 | 127.1 | ----- | 172.7 | 136.2 |
| C. P. 53-23 | ----- | ----- | ----- | ----- | ----- | 145.1 | 152.0 | 178.2 | 221.9 | 167.9 | 167.9 |
| C. P. 52-58 | ----- | ----- | ----- | ----- | ----- | 152.5 | 137.8 | ----- | ----- | ----- | 145.6 |
| C. P. 52-9 | ----- | ----- | ----- | ----- | ----- | 133.7 | 132.1 | ----- | ----- | ----- | 132.9 |
| C. P. 52-57 | ----- | ----- | ----- | ----- | ----- | 139.3 | 130.8 | 126.3 | ----- | 187.5 | 142.6 |
| C. P. 53-16 | 152.1 | 177.4 | 161.5 | 162.3 | 164.8 | ----- | ----- | ----- | ----- | ----- | 164.8 |
| C. P. 55-23 | 197.9 | ----- | ----- | ----- | 197.9 | ----- | ----- | ----- | ----- | ----- | 197.9 |
| C. P. 53-16 | ----- | ----- | ----- | ----- | ----- | 151.5 | 198.8 | 116.1 | 149.3 | 191.8 | 153.7 |
| C. P. 44-154 | 170.5 | ----- | ----- | ----- | 170.5 | 116.0 | ----- | ----- | ----- | ----- | 116.0 |
| C. P. 52-67 | ----- | ----- | ----- | ----- | ----- | 142.1 | 136.6 | 130.1 | 150.3 | 207.9 | 149.5 |
| Co. 290 | 176.8 | 153.5 | ----- | ----- | 163.1 | 112.4 | 137.1 | ----- | ----- | ----- | 123.3 |
| C. P. 36-111 | ----- | 146.8 | ----- | ----- | 146.8 | ----- | ----- | ----- | ----- | ----- | 76.9 |
| L.S.D. (.05) | 20.2 | 21.1 | 20.3 | 15.2 | 21.8 | 21.2 | 16.4 | 18.0 | 14.6 | 15.0 | |
| L.S.D. (.01) | 27.1 | 28.1 | 27.2 | 20.6 | 29.4 | 28.4 | 21.8 | 24.1 | 19.8 | 20.0 | |

Table 9. Results of sugarcane variety tests on light soils in the Bayou Teche-Lafayette area during 1959 (Pounds of sugar per acre)

| Variety | Plant Cane | | | | | First Stubble | | | | | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Billeaud | Youngerville | St. John D. Landry | Oaklawn | Average | Billeaud | Youngerville | St. John D. Landry | Oaklawn | Average | all crops |
| C. P. 51-24 | ----- | ----- | ----- | ----- | ----- | 5738 | 5409 | ----- | ----- | ----- | 5574 |
| C. P. 53-18 | ----- | ----- | ----- | ----- | ----- | 5410 | 4839 | ----- | ----- | ----- | 5190 |
| C. P. 53-1 | 3602 | 4396 | 6172 | 4623 | 4414 | 4641 | 4972 | 5539 | 4810 | 6380 | 5495 | 5068 |
| C. P. 51-21 | 3995 | 5240 | ----- | ----- | ----- | 4418 | 4824 | ----- | ----- | ----- | 5550 | 4984 |
| C. P. 55-14 | ----- | 4920 | 6101 | 5172 | 3994 | 4847 | 6275 | ----- | ----- | ----- | ----- | 4947 |
| C. P. 44-101 | 3202 | 3512 | 5497 | 4359 | 4068 | 4148 | ----- | 5527 | 5186 | 6234 | 5677 | 4912 |
| C. P. 36-13 | 3000 | 3257 | ----- | ----- | ----- | 3713 | 3967 | 5578 | ----- | 6724 | 5625 | 4793 |
| C. P. 43-47 | 3365 | 3491 | ----- | ----- | ----- | 3428 | 4980 | 5041 | ----- | 6312 | 5450 | 4776 |
| C. P. 52-68 | 3412 | 3482 | 6279 | 4445 | 4276 | 4379 | 4872 | 5201 | 6172 | 7772 | 5491 | 5100 | 4740 |
| C. P. 47-193 | ----- | ----- | 4380 | 4133 | 3174 | 3777 | 5283 | 5027 | 5024 | ----- | 5332 | 5199 | 4698 |
| M. Co. 310 | 3656 | 4497 | 5937 | ----- | 5053 | 4655 | 4258 | 5146 | 5074 | 3626 | 5361 | 4693 | 4674 |
| C. P. 48-103 | 2930 | 3558 | 5734 | ----- | 3944 | 3942 | 4661 | 5930 | 5739 | ----- | 5133 | 5371 | 4656 |
| C. P. 36-105 | 2836 | 4276 | 5584 | ----- | 3800 | 4074 | 5262 | 4874 | 5710 | ----- | 4972 | 5204 | 4639 |
| C. P. 53-22 | 3485 | 4011 | 5137 | 4456 | 4170 | 4252 | 5201 | 5853 | 4263 | 5790 | 5277 | 4883 | 4567 |
| C. P. 53-13 | ----- | ----- | ----- | ----- | ----- | ----- | 4251 | 3466 | 4434 | 4343 | 5128 | 4508 | 4408 |
| C. P. 55-30 | ----- | 4588 | 5205 | 4602 | 3194 | 4597 | ----- | ----- | ----- | ----- | ----- | ----- | 4397 |
| C. P. 55-22 | ----- | 3758 | 5844 | 4223 | 3324 | 4377 | 5027 | 4210 | 4498 | 5925 | 3853 | 3872 | 4137 |
| C. P. 44-155 | 2425 | 2983 | ----- | ----- | 2504 | 4172 | 4406 | ----- | 4958 | ----- | 5381 | 4732 | 3999 |
| C. P. 55-15 | 3770 | 5480 | 4186 | 2470 | 3976 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 3976 |
| C. P. 29-116 | 2298 | 3562 | ----- | ----- | 3080 | 3843 | 4661 | 4502 | ----- | 4649 | ----- | 4404 | 3962 |
| C. P. 53-23 | ----- | ----- | ----- | ----- | ----- | 3580 | 4231 | 3966 | 2630 | 5148 | 3911 | ----- | 3911 |
| C. P. 52-58 | ----- | ----- | ----- | ----- | ----- | ----- | 4351 | 3466 | ----- | ----- | ----- | ----- | 3908 |
| C. P. 52-9 | ----- | ----- | ----- | ----- | ----- | ----- | 3790 | 3989 | ----- | ----- | ----- | ----- | 3890 |
| C. P. 52-57 | ----- | ----- | ----- | ----- | ----- | ----- | 4210 | 3498 | 3925 | ----- | 3853 | 3872 | 3872 |
| C. P. 53-16 | 2820 | 5052 | 3950 | 3414 | 3836 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 3836 |
| C. P. 55-23 | 3783 | ----- | ----- | ----- | 3783 | ----- | ----- | ----- | 4958 | ----- | ----- | ----- | 3783 |
| C. P. 53-16 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 5381 | 4732 | 3783 |
| C. P. 44-154 | 3153 | ----- | ----- | ----- | 3153 | 3798 | 4135 | 2807 | 3090 | 4626 | 3691 | ----- | 3691 |
| C. P. 52-67 | ----- | ----- | ----- | ----- | ----- | 3935 | ----- | ----- | ----- | ----- | 3935 | ----- | 3544 |
| Co. 290 | 2854 | 3923 | ----- | ----- | 3188 | 3920 | 3979 | 3744 | 1930 | 3684 | 3371 | ----- | 3371 |
| C. P. 36-111 | ----- | 3680 | ----- | ----- | 3680 | ----- | 3275 | 3186 | ----- | ----- | 3230 | ----- | 3210 |
| L.S.D. (.05) | N.S. | 642 | 883 | 742 | 752 | ----- | 723 | 620 | 1013 | 547 | 543 | ----- | 552 |
| L.S.D. (.01) | N.S. | 858 | 1184 | 1002 | 1012 | ----- | 967 | 822 | 1361 | 742 | 729 | ----- | 2624 |

cial varieties, N. Co. 310 and C. P. 52-68, surpassed C. P. 44-101 by 10 and 5 percent, respectively, in yields of sugar per acre in all tests. C. P. 36-105, C. P. 48-103 and C. P. 47-193 yielded less sugar per acre than C. P. 44-101. C. P. 53-1 and C. P. 55-30 outyielded C. P. 44-101 by 9 and 4 percent, respectively, in that respect. C. P. 53-1 was relatively poor in first stubble, but plant cane yields were very good. C. P. 55-14 produced only 95 percent as much sugar per acre as C. P. 44-101 in the 4 plant cane tests of the 2 varieties.

## Discusson of Results

For critical evaluation varieties should be tested at several locations for a number of years. Not only is it important to determine the adaptability of a variety at each location, but it is also necessary to evaluate stubbling quality. This testing requires 2 or 3 harvests from each planting. Other criteria besides stubbling quality are earliness of maturity, relatively high sucrose and purity, resistance to diseases and insects, early spring growth for economy of weed control, cold tolerance, and resistance to inversion after cutting. All these factors are considered in interpreting results of variety tests and in making recommendations to growers.

C. P. 44-101 is the leading commercial variety in Louisiana, occupying 48 percent of the sugarcane acreage for the 1960 crop(4). For 6 years it has comprised approximately half of the State acreage, a position it reached because of its adaptability to all soil types, high yields of cane with satisfactory sucrose, good stubbling

Table 10. Results of sugarcane variety tests on light soils in the Red River area during 1959. (Shirley test field).

| Variety | Tons of cane per acre | | | | Pounds of sugar per ton of cane | | | | Pounds of sugar per acre | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Plant cane | First stubble | Second stubble | Avg. | Plant cane | First stubble | Second stubble | Avg. | Plant cane | First stubble | Second stubble | Avg. |
| C. P. 48-103 | 26.41 | 31.38 | 28.20 | 28.66 | 190.3 | 193.3 | 202.8 | 195.5 | 5026 | 6066 | 5719 | 5603 |
| C. P. 55-14 | 32.23 | ---- | ---- | 32.23 | 160.1 | ---- | ---- | 160.1 | 5160 | ---- | ---- | 5160 |
| C. P. 51-21 | 28.08 | 32.26 | ---- | 30.17 | 149.2 | 169.6 | ---- | 160.1 | 4190 | 5471 | ---- | 4831 |
| C. P. 52-68 | 28.59 | 29.81 | 31.47 | 29.96 | 168.4 | 155.8 | 157.4 | 160.5 | 4815 | 4644 | 4953 | 4809 |
| C. P. 55-22 | 33.71 | ---- | ---- | 33.71 | 139.6 | ---- | ---- | 139.6 | 4706 | ---- | ---- | 4706 |
| C. P. 44-101 | 31.18 | 35.97 | 31.85 | 33.00 | 155.5 | 129.6 | 140.9 | 141.4 | 4848 | 4662 | 4488 | 4666 |
| C. P. 55-30 | 32.04 | ---- | ---- | 32.04 | 143.9 | ---- | ---- | 143.9 | 4611 | ---- | ---- | 4611 |
| C. P. 36-13 | 28.84 | 37.32 | 30.10 | 32.09 | 139.7 | 113.3 | 158.7 | 137.2 | 4029 | 4228 | 4777 | 4403 |
| C. P. 34-120 | 24.43 | 29.02 | 29.27 | 27.57 | 159.0 | 148.0 | 168.2 | 158.4 | 3884 | 4295 | 4923 | 4367 |
| C. P. 51-24 | ---- | 27.19 | ---- | 27.19 | ---- | 150.1 | ---- | 150.1 | ---- | 4231 | ---- | 4231 |
| C. P. 55-37 | 29.24 | ---- | ---- | 29.24 | 143.4 | ---- | ---- | 143.4 | 4193 | ---- | ---- | 4193 |
| C. P. 53-1 | 30.77 | 31.06 | ---- | 30.91 | 145.5 | 120.8 | ---- | 133.1 | 4477 | 3752 | ---- | 4115 |
| C. P. 44-155 | 28.48 | 27.89 | 26.78 | 27.72 | 141.6 | 152.8 | 146.4 | 146.9 | 4033 | 4262 | 3921 | 4072 |
| C. P. 36-105 | 29.18 | 35.37 | 30.32 | 31.62 | 136.8 | 120.6 | 118.5 | 125.3 | 3992 | 4266 | 3593 | 3962 |
| C. P. 53-18 | ---- | 25.53 | ---- | 25.53 | ---- | 153.1 | ---- | 153.1 | ---- | 3909 | ---- | 3909 |
| C. P. 43-47 | 25.29 | 29.48 | 24.20 | 26.32 | 151.1 | 142.5 | 151.6 | 148.4 | 3821 | 4201 | 3669 | 3906 |
| N. Co. 310 | 33.16 | 30.43 | 29.82 | 31.14 | 135.9 | 120.2 | 116.9 | 124.3 | 4506 | 3658 | 3486 | 3870 |
| C. P. 47-193 | 27.35 | 29.96 | 27.58 | 28.30 | 145.3 | 121.9 | 140.4 | 135.9 | 3974 | 3652 | 3872 | 3846 |
| C. P. 52-37 | ---- | ---- | 28.91 | 28.91 | ---- | ---- | 131.2 | 131.2 | ---- | ---- | 3793 | 3793 |
| C. P. 55-15 | 23.41 | ---- | ---- | 23.41 | 155.6 | ---- | ---- | 155.6 | 3643 | ---- | ---- | 3643 |
| C. P. 53-22 | 33.68 | 26.75 | ---- | 30.22 | 124.3 | 91.1 | ---- | 109.6 | 4186 | 2437 | ---- | 3312 |
| C. P. 52-16 | ---- | ---- | 23.76 | 23.76 | ---- | ---- | 139.2 | 139.2 | ---- | ---- | 3307 | 3307 |
| C. P. 53-15 | ---- | 30.70 | ---- | 30.70 | ---- | 105.5 | ---- | 105.5 | ---- | 3239 | ---- | 3239 |
| C. P. 36-111 | 33.63 | 33.20 | 33.91 | 33.58 | 106.6 | 84.0 | 96.4 | 95.7 | 3585 | 2789 | 3269 | 3214 |
| C. P. 29-320 | 20.66 | 19.92 | 18.48 | 19.69 | 179.6 | 139.0 | 170.6 | 163.1 | 3711 | 2769 | 3153 | 3211 |
| C. P. 29-116 | ---- | 34.94 | 28.96 | 31.95 | ---- | 95.3 | 100.8 | 97.8 | ---- | 3330 | 2919 | 3124 |
| C. P. 52-57 | ---- | 31.15 | 24.79 | 27.97 | ---- | 105.4 | 103.4 | 104.4 | ---- | 3283 | 2563 | 2923 |
| C. P. 48-117 | ---- | ---- | 27.27 | 27.27 | ---- | ---- | 99.7 | 99.7 | ---- | ---- | 2719 | 2719 |
| C. P. 53-16 | ---- | 23.09 | ---- | 23.09 | ---- | 108.9 | ---- | 108.9 | ---- | 2515 | ---- | 2515 |
| C. P. 53-23 | ---- | 21.05 | ---- | 21.05 | ---- | 114.3 | ---- | 114.3 | ---- | 2406 | ---- | 2406 |
| C. P. 52-67 | ---- | 6.59 | 13.27 | 9.93 | ---- | 95.7 | 107.0 | 103.3 | ---- | 631 | 1420 | 1026 |
| L.S.D. (.05) | 3.25 | 4.98 | 2.99 | | 18.3 | 16.9 | 25.0 | | 767 | 881 | 711 | |
| L.S.D. (.01) | 4.34 | 6.65 | 4.01 | | 24.5 | 22.6 | 33.6 | | 1023 | 1178 | 956 | |

qualities, and tolerance to cold injury. Prior to 1960 it consistently gave good stands of cane from either summer or fall planting, but in the spring of this year poor stands were rather general in fields planted in late August or early September 1959. For the most part, other varieties planted at the same time gave satisfactory stands, but smaller acreages of them were planted.

In most years, planting the present commercial varieties in August or early September resulted in satisfactory stands the following spring, and, as a rule, yields from summer-planted cane have been higher than from fall planting (5). In some years, however, poor stands may result from planting during that period if an early fall freeze kills the young plants before they develop good root systems and enough stem growth below ground to carry them through the winter. A freeze in early November of 1959 killed all growth to the ground before the plants from summer-planted cane had become established and independent of the seed piece. When the seed piece had been exhausted of its food supply in the spring, establishment of a stand depended on the ability of the small piece of shoot below ground to develop roots and start new growth. Because of continued cool weather until late in the spring, many plants were unable to develop roots and died. Therefore, stands that had been satisfactory in the fall were very gappy in April.

It must be recognized that there is this hazard in summer planting. However, the advantage of early planting is that the labor required is distributed over a longer period, and planting can usually be completed before the beginning of grinding.

N. Co. 310 is adapted to both light and heavy soils, on which it generally produces high yields; in 1958 and 1959, however, its yields were below its previous 5-year average.[3] In 1959, it yielded less sugar per acre than C. P. 44-101 and C. P. 52-68 on light soils, but exceeded both on heavy soils. It is more tolerant to cold injury than any other commercial variety. However, it lodges more than other varieties and harvesting costs may be higher. Because it is suscep-

Table 11. Summary of tests with sugarcane varieties on heavy soils during 1959 showing averages of all locations

| Variety | Crop (N) | Tons of cane per acre | Pounds of sugar per ton of cane | Sugar per acre | |
|---|---|---|---|---|---|
| | | | | Pounds | Percent of C. P. 44-101* |
| N. Co. 310 | Plant cane (4) | 17.32 | 184.0 | 3188 | 121 |
| | First stubble (3) | 24.94 | 184.7 | 4607 | 107 |
| | Second stubble (1) | 20.86 | 197.2 | 4114 | 93 |
| | Average 3 crops(8) | 20.62 | 186.0 | 3836 | 110 |
| C. P. 52-68 | Plant cane (4) | 15.75 | 176.2 | 2776 | 106 |
| | First stubble (3) | 22.69 | 196.4 | 4457 | 104 |
| | Second stubble (1) | 24.45 | 195.6 | 4782 | 108 |
| | Average 3 crops (8) | 19.44 | 188.1 | 3657 | 105 |
| C. P. 44-101 | Plant cane (4) | 15.67 | 167.6 | 2627 | 100 |
| | First stubble (3) | 23.48 | 182.8 | 4292 | 100 |
| | Second stubble (1) | 24.58 | 180.5 | 4437 | 100 |
| | Average 3 crops (8) | 19.71 | 176.4 | 3478 | 100 |
| C. P. 53-1 | Plant cane (4) | 16.91 | 189.2 | 3200 | 122 |
| | First stubble (2) | 17.89 | 196.8 | 3520 | 91 |
| | Average 2 crops(6) | 17.24 | 191.8 | 3307 | 109 |
| C. P. 36-105 | Plant cane (4) | 16.29 | 164.7 | 2684 | 102 |
| | First stubble (3) | 21.42 | 182.9 | 3917 | 91 |
| | Second stubble (1) | 20.40 | 192.5 | 3927 | 89 |
| | Average 3 crops(8) | 18.73 | 176.3 | 3302 | 95 |
| C. P. 48-103 | Plant cane (4) | 11.73 | 200.9 | 2358 | 90 |
| | First stubble (3) | 17.69 | 225.3 | 3986 | 93 |
| | Second stubble (1) | 19.98 | 224.5 | 4486 | 101 |
| | Average 3 crops (8) | 15.00 | 215.7 | 3234 | 93 |
| C. P. 53-22 | Plant cane (3) | 17.18 | 154.7 | 2657 | 96 |
| | First stubble (3) | 19.94 | 178.5 | 3559 | 83 |
| | Average 2 crops (6) | 18.56 | 167.4 | 3108 | 88 |
| C. P. 47-193 | Plant cane (4) | 10.24 | 162.5 | 1664 | 63 |
| | First stubble (3) | 19.87 | 193.7 | 3849 | 90 |
| | Second stubble (1) | 19.07 | 198.3 | 3782 | 85 |
| | Average 3 crops (8) | 14.96 | 183.8 | 2748 | 79 |
| C. P. 55-30 | Plant cane (4) | 15.96 | 171.0 | 2730 | 104 |
| C. P. 55-14 | Plant cane (4) | 13.80 | 180.3 | 2487 | 95 |

*Percentage values based on yields in comparable tests.

(N) = Number of tests.

tible to mosaic(1), attention must be given to keeping seed supplies free of this disease.

C. P. 52-68 has many good qualities including adaptability to both light and heavy soils, is relatively high in sucrose, and produces good stubble crops. It is susceptible to mosaic and when infected its yields are greatly reduced, which will probably limit the extent to which it will be increased. It is also more susceptible to cold injury than C. P. 44-101 and N. Co. 310. The variety is valuable where mosaic is controlled.

C. P. 48-103 is the best variety to grow for early milling. Its exceptionally early maturity makes it valuable for that purpose, and most growers should have a certain percentage of their crop devoted to this variety. It is better adapted to the light soils.

Table 12. Results of sugarcane variety tests on heavy soils in Louisiana during 1959 (Tons of cane per acre)

| Variety | Plant Cane | | | | | First Stubble | | | | Second Stubble | Average of all tests |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Greenwood | Oaklawn | Cinclare | (Houma) Station | Average | Greenwood | Oaklawn | (Houma) Station | Average | Cinclare | |
| N. Co. 310 | 13.31 | 23.99 | 15.18 | 16.82 | 17.32 | 18.81 | 21.98 | 34.02 | 24.94 | 20.86 | 20.62 |
| C. P. 52-68 | 11.36 | 22.99 | 9.98 | 18.67 | 15.75 | 12.31 | 26.89 | 28.86 | 22.69 | 24.45 | 19.44 |
| C. P. 29-320 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 19.45 | 19.45 |
| C. P. 48-117 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 22.02 | 22.02 |
| C. P. 43-47 | ----- | ----- | 12.42 | ----- | 12.42 | 17.67 | 23.97 | ----- | 20.82 | 19.27 | 18.33 |
| C. P. 53-15 | ----- | ----- | ----- | ----- | ----- | 12.64 | 25.02 | ----- | 18.83 | ----- | 18.83 |
| C. P. 44-101 | 11.06 | 21.82 | 14.60 | 15.21 | 15.67 | 14.42 | 26.83 | 29.19 | 23.48 | 24.58 | 19.71 |
| C. P. 53-1 | 16.66 | 21.88 | 13.55 | 15.56 | 16.91 | 13.31 | 22.47 | ----- | 17.89 | ----- | 17.24 |
| C. P. 36-105 | 13.04 | 21.62 | 14.96 | 15.54 | 16.29 | 15.62 | 20.75 | 27.88 | 21.42 | 20.40 | 18.73 |
| C. P. 52-57 | ----- | ----- | ----- | ----- | ----- | 12.44 | 21.01 | 22.91 | 18.79 | 20.28 | 19.16 |
| C. P. 48-103 | 11.96 | 16.73 | 8.39 | 9.85 | 11.73 | 7.91 | 20.96 | 24.19 | 17.69 | 19.98 | 15.00 |
| C. P. 53-18 | ----- | ----- | ----- | ----- | ----- | 9.72 | 18.80 | ----- | 14.26 | ----- | 14.26 |
| C. P. 53-22 | 12.40 | 24.48 | ----- | 14.66 | 17.18 | 15.06 | 22.71 | 22.05 | 19.94 | ----- | 18.56 |
| C. P. 44-155 | ----- | ----- | 10.96 | ----- | 10.96 | ----- | ----- | ----- | ----- | 23.48 | 17.22 |
| C. P. 36-13 | ----- | ----- | 10.40 | ----- | 10.40 | ----- | ----- | ----- | ----- | 20.83 | 15.62 |
| C. P. 47-193 | 7.80 | 16.70 | 7.25 | 9.21 | 10.24 | 16.27 | 20.92 | 22.43 | 19.87 | 19.07 | 14.96 |
| C. P. 52-16 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 16.49 | 16.49 |
| C. P. 29-116 | ----- | ----- | ----- | ----- | ----- | 8.16 | 18.36 | 20.11 | 15.54 | 17.98 | 16.15 |
| C. P. 55-30 | 16.54 | 23.47 | 11.10 | 12.74 | 15.96 | ----- | ----- | ----- | ----- | ----- | 15.96 |
| C. P. 51-21 | ----- | ----- | 13.02 | ----- | 13.02 | ----- | ----- | ----- | ----- | ----- | 13.02 |
| C. P. 53-16 | ----- | ----- | ----- | ----- | ----- | 10.34 | 20.06 | ----- | 15.20 | ----- | 15.20 |
| C. P. 55-14 | 10.91 | 18.15 | 15.38 | 10.75 | 13.80 | ----- | ----- | ----- | ----- | ----- | 13.80 |
| C. P. 55-37 | 14.54 | 21.02 | 9.87 | 10.70 | 14.03 | ----- | ----- | ----- | ----- | ----- | 14.03 |
| C. P. 53-23 | ----- | ----- | ----- | ----- | ----- | 3.44 | 17.26 | ----- | 10.35 | ----- | 10.35 |
| C. P. 52-67 | ----- | ----- | ----- | ----- | ----- | 6.06 | 16.37 | ----- | 11.22 | 13.07 | 11.83 |
| C. P. 55-15 | 10.20 | 13.86 | 7.21 | 9.11 | 10.10 | ----- | ----- | ----- | ----- | ----- | 10.10 |
| C. P. 55-22 | 10.42 | 21.16 | 10.84 | 6.03 | 12.11 | ----- | ----- | ----- | ----- | ----- | 12.11 |
| C. P. 52-38 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 7.18 | 7.18 |
| L.S.D. (.05) | N.S. | 2.12 | 4.01 | 2.64 | | 3.63 | 4.44 | 4.54 | | 3.17 | |
| L.S.D. (.01) | N.S. | 2.90 | 5.42 | 3.56 | | 4.85 | 5.99 | 6.16 | | 4.41 | |

Table 13. Results of sugarcane variety tests on heavy soils in Louisiana during 1959 (Pounds of sugar per ton of cane)

| Variety | Plant Cane | | | | | First Stubble | | | | Second Stubble | Average of all crops |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Greenwood | Oaklawn | Cinclare | (Houma) Station | Average | Greenwood | Oaklawn | (Houma) Station | Average | Cinclare | |
| N. Co. 310 | 176.1 | 192.4 | 180.4 | 181.7 | 184.0 | 167.6 | 211.3 | 177.1 | 184.7 | 197.2 | 186.0 |
| C. P. 52-68 | 167.1 | 180.3 | 161.7 | 184.6 | 176.2 | 168.3 | 208.4 | 197.4 | 196.4 | 195.6 | 188.1 |
| C. P. 29-320 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 183.2 | 183.2 |
| C. P. 48-117 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 161.3 | 161.3 |
| C. P. 43-47 | ----- | ----- | 170.4 | ----- | 170.4 | 162.5 | 218.1 | ----- | 194.5 | 197.1 | 191.1 |
| C. P. 53-15 | ----- | ----- | ----- | ----- | ----- | 141.0 | 208.4 | ----- | 185.8 | ----- | 185.8 |
| C. P. 44-101 | 155.7 | 181.0 | 149.5 | 174.4 | 167.6 | 167.1 | 199.2 | 175.5 | 182.8 | 180.5 | 176.4 |
| C. P. 53-1 | 179.2 | 201.6 | 175.9 | 194.2 | 189.2 | 147.4 | 225.7 | ----- | 196.8 | ----- | 191.8 |
| C. P. 36-105 | 157.3 | 164.4 | 171.2 | 165.3 | 164.7 | 162.9 | 208.2 | 175.2 | 182.9 | 192.5 | 176.3 |
| C. P. 52-57 | ----- | ----- | ----- | ----- | ----- | 145.1 | 197.3 | 165.6 | 172.9 | 160.8 | 169.7 |
| C. P. 48-103 | 183.4 | 216.9 | 191.7 | 203.0 | 200.9 | 161.4 | 251.5 | 223.7 | 225.3 | 224.5 | 215.7 |
| C. P. 53-18 | ----- | ----- | ----- | ----- | ----- | 184.6 | 248.1 | ----- | 226.5 | ----- | 226.5 |
| C. P. 53-22 | 136.0 | 166.2 | ----- | 151.2 | 154.7 | 134.2 | 202.1 | 184.4 | 178.5 | ----- | 167.4 |
| C. P. 44-155 | ----- | ----- | 149.8 | ----- | 149.8 | ----- | ----- | ----- | ----- | 185.6 | 174.2 |
| C. P. 36-13 | ----- | ----- | 165.7 | ----- | 165.7 | ----- | ----- | ----- | ----- | 194.8 | 185.1 |
| C. P. 47-193 | 157.9 | 163.4 | 160.6 | 166.5 | 162.5 | 172.8 | 212.5 | 191.2 | 193.7 | 198.3 | 183.8 |
| C. P. 52-16 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 166.0 | 166.0 |
| C. P. 29-116 | ----- | ----- | ----- | ----- | ----- | 131.9 | 186.4 | 173.2 | 171.2 | 163.4 | 169.0 |
| C. P. 55-30 | 162.7 | 182.6 | 164.5 | 166.2 | 171.0 | ----- | ----- | ----- | ----- | ----- | 171.0 |
| C. P. 51-21 | ----- | ----- | 209.6 | ----- | 209.6 | ----- | ----- | ----- | ----- | ----- | 209.6 |
| C. P. 53-16 | ----- | ----- | ----- | ----- | ----- | 119.5 | 188.3 | ----- | 164.9 | ----- | 164.9 |
| C. P. 55-14 | 174.0 | 180.6 | 185.0 | 179.3 | 180.3 | ----- | ----- | ----- | ----- | ----- | 180.3 |
| C. P. 55-37 | 161.7 | 177.7 | 169.7 | 161.0 | 169.0 | ----- | ----- | ----- | ----- | ----- | 169.0 |
| C. P. 53-23 | ----- | ----- | ----- | ----- | ----- | 139.5 | 233.7 | ----- | 218.1 | ----- | 218.1 |
| C. P. 52-67 | ----- | ----- | ----- | ----- | ----- | 116.2 | 195.5 | ----- | 174.0 | 153.9 | 166.6 |
| C. P. 55-15 | 179.5 | 204.2 | 178.6 | 187.6 | 189.6 | ----- | ----- | ----- | ----- | ----- | 189.6 |
| C. P. 55-22 | 151.8 | 163.4 | 149.3 | 142.7 | 155.2 | ----- | ----- | ----- | ----- | ----- | 155.2 |
| C. P. 52-38 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 177.1 | 177.1 |
| L.S.D. (.05) | 15.3 | 17.7 | 19.3 | 10.9 | | 19.8 | 15.3 | 13.0 | | 24.6 | |
| L.S.D. (.01) | 20.5 | 24.1 | 26.1 | 14.6 | | 26.5 | 20.7 | 17.7 | | 33.6 | |

It does not shade well and does not compete with weeds as well as the other commercial varieties. C. P. 47-193 is also early maturing, but yields of cane have been very poor in the last few years and its relatively high rate of inversion after cutting is a serious disadvantage.

Treating seed cane for the control of ratoon stunting disease has improved the yields of C. P. 36-105, and its performance in 1959 compared favorably with that of N. Co. 310 and C. P. 44-101. Since its stalks become

Table 14. Results of sugarcane variety tests on heavy soils in Louisiana during 1959 (Pounds of sugar per acre)

| riety | Plant Cane | | | | | First Stubble | | | | SecondStubble | Average of |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Greenwood | Oaklawn | Cinclare | (Houma) Station | Average | Greenwood | Oaklawn | (Houma) Station | Average | Cinclare | all crops |
| Co. 310 | 2344 | 4615 | 2738 | 3056 | 3188 | 3153 | 4644 | 6026 | 4607 | 4114 | 3836 |
| P. 52-68 | 1898 | 4145 | 1614 | 3446 | 2776 | 2072 | 5603 | 5697 | 4457 | 4782 | 3657 |
| P. 29-320 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 3563 | 3563 |
| P. 48-117 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 3552 | 3552 |
| P. 43-47 | ----- | ----- | 2116 | ----- | 2116 | 2872 | 5227 | ----- | 4050 | 3798 | 3503 |
| P. 53-15 | ----- | ----- | ----- | ----- | ----- | 1782 | 5214 | ----- | 3498 | ----- | 3498 |
| P. 44-101 | 1722 | 3949 | 2183 | 2653 | 2627 | 2409 | 5344 | 5123 | 4292 | 4437 | 3478 |
| P. 53-1 | 2986 | 4410 | 2383 | 3022 | 3200 | 1968 | 5072 | ----- | 3520 | ----- | 3307 |
| P. 36-105 | 2051 | 3554 | 2561 | 2569 | 2684 | 2545 | 4320 | 4885 | 3917 | 3927 | 3302 |
| P. 52-57 | ----- | ----- | ----- | ----- | ----- | 1805 | 4145 | 3794 | 3248 | 3261 | 3251 |
| P. 48-103 | 2194 | 3628 | 1608 | 2000 | 2358 | 1277 | 5271 | 5411 | 3986 | 4486 | 3234 |
| P. 53-18 | ----- | ----- | ----- | ----- | ----- | 1794 | 4665 | ----- | 3230 | ----- | 3230 |
| P. 53-22 | 1686 | 4068 | ----- | 2217 | 2657 | 2021 | 4589 | 4066 | 3559 | ----- | 3108 |
| P. 44-155 | ----- | ----- | 1642 | ----- | 1642 | ----- | ----- | ----- | ----- | 4358 | 3000 |
| P. 36-13 | ----- | ----- | 1723 | ----- | 1723 | ----- | ----- | ----- | ----- | 4058 | 2890 |
| P. 47-193 | 1232 | 2728 | 1164 | 1533 | 1664 | 2812 | 4446 | 4289 | 3849 | 3782 | 2748 |
| P. 52-16 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 2737 | 2737 |
| P. 29-116 | ----- | ----- | ----- | ----- | ----- | 1076 | 3422 | 3483 | 2660 | 2938 | 2730 |
| P. 55-30 | 2691 | 4286 | 1826 | 2117 | 2730 | ----- | ----- | ----- | ----- | ----- | 2730 |
| P. 51-21 | ----- | ----- | 2729 | ----- | 2729 | ----- | ----- | ----- | ----- | ----- | 2729 |
| P. 53-16 | ----- | ----- | ----- | ----- | ----- | 1236 | 3777 | ----- | 2506 | ----- | 2506 |
| P. 55-14 | 1898 | 3278 | 2845 | 1928 | 2487 | ----- | ----- | ----- | ----- | ----- | 2487 |
| P. 55-37 | 2351 | 3735 | 1675 | 1723 | 2371 | ----- | ----- | ----- | ----- | ----- | 2371 |
| P. 53-23 | ----- | ----- | ----- | ----- | ----- | 480 | 4034 | ----- | 2257 | ----- | 2257 |
| P. 52-67 | ----- | ----- | ----- | ----- | ----- | 704 | 3200 | ----- | 1952 | 2011 | 1972 |
| P. 55-15 | 1831 | 2830 | 1288 | 1709 | 1914 | ----- | ----- | ----- | ----- | ----- | 1914 |
| P. 55-22 | 1582 | 3458 | 1618 | 860 | 1880 | ----- | ----- | ----- | ----- | ----- | 1880 |
| P. 52-38 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | 1272 | 1272 |
| .S.D. (.05) | N.S. | 1121 | 870 | 482 | | 600 | 1000 | 909 | | 551 | |
| .S.D. (.01) | N.S. | 1529 | 1176 | 650 | | 802 | 1349 | 1232 | | 765 | |

ery brittle and break easily, harvesting of lodged cane with pick-up ttachments is difficult. It is susceptible to cold injury and must be harvested soon after a freeze.

C. P. 53-1 is being increased at the econdary increase stations. It is susceptible to stunting disease and continued heat treatment of seed cane would be necessary if it were to be grown commercially. It grows erect, hades well, and detrashes easily in mechanical cutting. Its sucrose is generally a little above that of C. P. 44-101.

C. P. 55-14 and C. P. 55-30 are presently at the increase stations but more testing will be needed before their suitability for commercial utilization can be determined. Preliminary tests at Houma and Baton Rouge indicate that stubble crops of C. P. 55-14 will be poor but that C. P. 55-30 stubbles satisfactorily (data not shown). More information will be needed on C. P. 55-14, C. P. 55-22, and C. P. 53-37 as well as the other varieties recently introduced to the test fields.

[1] Research Agronomists, Crops Research Division, Agricultural Research Service, United States Department of Agriculture.

[2] Assistant Agronomist, Department of Outfield Sugars, Louisiana Agricultural Experiment Station.

[3] Summary of important sugarcane varietal information based on tests conducted in Louisiana during the period 1955-1959. Mimeographed. Issued jointly by the U. S. Department of Agriculture and the Louisiana Agricultural Experiment Station.

## Literature Cited


1. Abbott, E. V. 1959. Importance of mosaic in present commercial varieties of sugarcane in Louisiana. Sugar Bulletin 37(15): 179-181.
2. Arceneaux, George. 1935 A simplified method of making theoretical sugar yield calculations in accordance with the Winter-Carp-Geerligs formula. Inter. Sugar Jour. 37: 264-265.
3. Guilbeau, W. F., E. E. Coll and L. F. Martin. 1959. Milling and processing characteristics of C. P. 51-21 compared with commercial varieties C. P. 44-101 and N. Co. 310. Sugar Bulletin 38(6): 70-71.
4. Hebert, Leo P. The Louisiana sugarcane variety census for 1960. The Sugar Bulletin. In press.
5. Hebert, Leo P., and R. J. Matherne. 1959. Effect of depth of placement of seed piece and date of planting on yields of cane and sugar from C. P. 36-105 and C. P. 44-101 at Houma, Louisiana. Sugar Bulletin 37(20): 260-265.
6. Matherne, R. J., and Leo P. Hebert. 1956. Results of sugarcane variety tests in Louisiana during 1955. Sugar Bulletin 34(22): 338-348.

## IN THE FIELD

(Continued from page 280A)

terioration of that wonderful cane, Creole."

Further quotes:

*1847, Agriculture and Manufacture —South and West,* "Under the Tariff of 1816, the State of Louisiana was already supplying one half of the sugar required for the consumption of the United States, and was bidding fair soon to meet the entire consumption."

*1857, The Sugar Interest. De Bow's Review.* "In 1874, then according to the estimates of McCulloch and Simonds, nearly one fourth of all the sugar produced upon the face of the globe was made in the State of Louisiana."

*1888, The cultivation of cane in Louisiana, by W. W. Pugh of Assumption.* "It is a matter of grave doubt if we (on the Lafourche) are not in the habit of planting our cane too deep in the ground."

*1898, The Sugar Planter.* "At the recent annual meeting of the Louisiana Sugar Planters Association, Dr. Stubbs said that he estimated that $2,000,000 was annually lost by Louisiana Sugar planters using too much seed cane. It was better and cheaper to plant carefully, and use from one to two stalks."

The historical information in this thesis makes for good reading and mentions many prominent sugar families.

**"Sugar Factory Insurance Specialists"**

**GILLIS, HULSE and COLCOCK, Inc.**

**839 Union St.** **New Orleans, La.**

**Telephone JA 2-1225**

**Recapitulation of Final Manufacturing Reports of Florida Sugar Cane Factories, Crop 1959 - 60**

| | STATE 3 FACTORIE |
|---|---|
| Crop days, average | 152.6 |
| Lost time, % total time | 8.0 |
| Tons cane ground (gross) | 1,844,61 |
| Tons cane ground (net) | 1,770,82 |
| % Total cane ground | 100.0 |
| Tons cane ground per hour | 182.4 |
| Extraction, N.J., % cane | 74.6 |
| Sucrose extraction, % | 91.4 |
| Maceration, % cane | 16.0 |
| Fibre, % cane | 12.4 |
| Java ratio | 78.4 |
| Analyses: | |
| Crusher juice Brix | 16.9 |
| Crusher juice sucrose | 14.2 |
| Brix factor | 97.2 |
| Sucrose factor | 96.0 |
| Normal juice Brix | 16.5 |
| Normal juice sucrose | 13.7 |
| Normal juice purity | 82.9 |
| Factory syrup Brix | 62.2 |
| Residual juice Brix | 8.5 |
| Residual juice purity | 76.1 |
| Bagasse, % sucrose | 3.2 |
| Bagasse, % moisture | 52.2 |
| Bagasse, % fibre | 42.9 |
| Press cake, % sucrose | 3.6 |
| Sucrose balance: | |
| B/S Mols. Sucrose in, % cane | .949 |
| Press cake, sucrose in, % cane | .136 |
| Undetermined " " " " | .163 |
| Bagasse " " " " | .959 |
| Total losses " " " " | 2.207 |
| Sugar " " " " | 8.988 |
| Cane, total sucrose in, % cane | 11.195 |
| Lbs. 96° sugar M&E, T/net cane | 195.04 |
| Lbs. sugar M&E, T/gross cane | 187.24 |
| Gals. B/S mols., 80° Brix T/G. cane | 5.91 |
| Boiling House Efficiency | 95.62 |

### *DID YOU KNOW . . . ?*

That the British are the third largest per capita sugar consumers in the world with a per capita consumption of 112 pounds.

# AMERICAN MOLASSES COMPANY

OF LOUISIANA, INC.

RECEIVERS AND SHIPPERS
OF
ALL GRADES OF MOLASSES

NEW ORLEANS OFFICE AND PLANT
400 North Gayoso St.
Phones: HUnter 8-1345—1346

*We Invite Molasses and Syrup Offerings*

# PENICK & FORD LTD.,

INCORPORATED

Buyers and Sellers
of
Syrup and Molasses

1449 National Bank of Commerce Bldg.
New Orleans, La.

MEMBER:
*N. O. Board of Trade; Louisiana Sugar Exchange, Inc.*

# CHAS. A. LEVY

BROKER

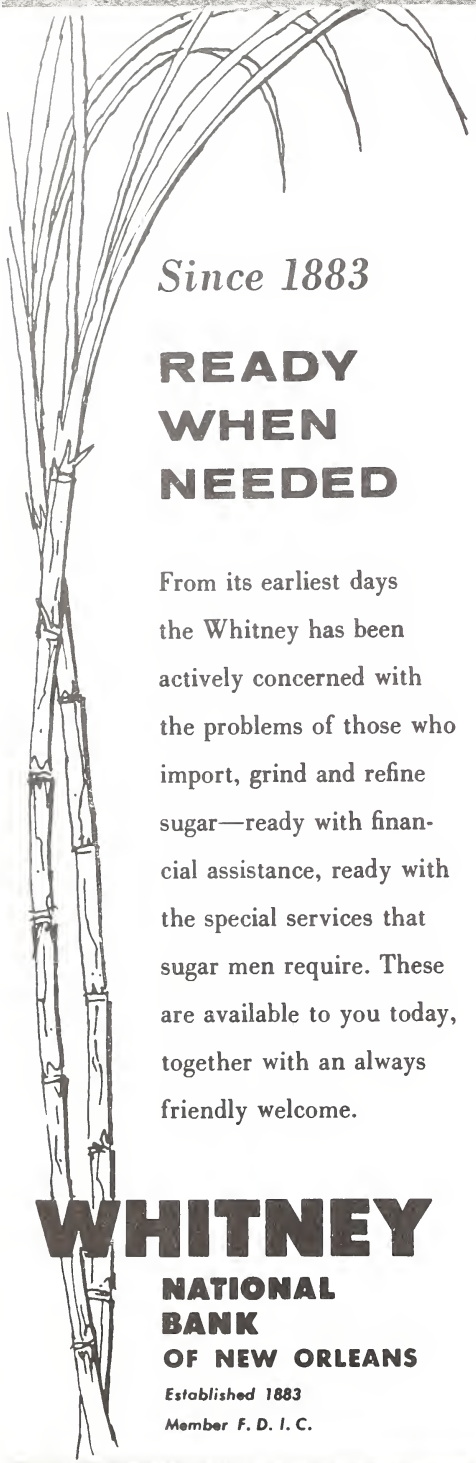
SUGAR EXCLUSIVELY

*Domestic . . . Foreign*

336 MAGAZINE STREET NEW ORLEANS, LA.

Blackstrap Department Buying Orders Solicited

CODES: CABLE ADDRESS:
Robinson—Rma—Compact Sugar CALEV



*Since 1883*

**READY WHEN NEEDED**

From its earliest days the Whitney has been actively concerned with the problems of those who import, grind and refine sugar—ready with financial assistance, ready with the special services that sugar men require. These are available to you today, together with an always friendly welcome.

**WHITNEY**
**NATIONAL BANK**
**OF NEW ORLEANS**
*Established 1883*
*Member F. D. I. C.*

## Commercial Members of the AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC.

AMERICAN MOLASSES CO., OF LOUISIANA, INC.
400 N. Gayoso St.
New Orleans, La.

HARRY L. LAWS & CO., INC.
126 Carondelet Street
New Orleans 12, La.

THE HIBERNIA NATIONAL BANK
New Orleans, La.

LAMBORN & COMPANY, INC.
Whitney Building
New Orleans, La.

LEBOURGEOIS BROKERAGE CO.
823 Perdido Street
New Orleans, La.

THE NATIONAL BANK OF COMMERCE
New Orleans, La.

NATIONAL SUGAR REFINING CO.
Carondelet Bldg.
New Orleans, La.

PENICK & FORD LTD., INC.
National Bank of Commerce Bldg.
New Orleans, La.

ESSO STANDARD OIL COMPANY
(Louisiana Division)
P. O. Box 1250 New Orleans 10, La.

STANDARD SUPPLY & HARDWARE CO., INC.
822 Tchoupitoulas St.
New Orleans, La.

STATE AGRICULTURAL CREDIT CORP., INC.
837 Whitney Building
New Orleans, La.

WHITNEY NATIONAL BANK
New Orleans, La.

3 3.61
u 35
.1
dup
La. State University,
University. Station
Baton Rouge.La.
(3)
LOUISIANA STATE UNIVERSITY LIBRARY
CHEMISTRY LIBRARY

# THE SUGAR BULLETIN

38 — No. 23 SEPTEMBER 1, 1960

*Official Bulletin of the American Sugar Cane League of the U. S. A.*

## WHAT YOUR LEAGUE DUES DO FOR YOU

Part of your League dues are used to support sugar cane research. How your dues help in the development and distribution of new varieties was discussed in the June 15, 1960 issue of The Sugar Bulletin. There are many other phases of research in which the League plays a part.

The League helps obtain Federal and State funds for sugar cane research and contributes League funds toward those projects not adequately financed by Federal and State money. Through the years there have been many such instances. For example, the method now being used to control Stunting Disease was developed with the help of money from the League. The League is currently contributing financially toward farm machinery research and the employment of labor at the Houma and Canal Point Experiment Stations. In some instances your League has paid salaries of newly assigned scientists until they could be placed on the Federal payroll.

Numerous grower members of the League serve on advisory committees which work closely with State and Federal scientists on sugar cane experiments. There are no other farmers who have a closer relationship with the research workers than do the Louisiana cane farmers. The League makes this splendid working relationship possible.

*Warren Harang, Jr.,*
*President*

**Be sure to read Notice of Special Meeting of the American Sugar Cane League on Page 308**

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry

THE
# SUGAR BULLETIN

**414 Whitney Bldg., New Orleans 12**

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Edito

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

**Issued on the 1st and 15th of each month.** **Subscription: Member 50 cents a year. Non-Members $3.00 a year.**

**Washington Office, 510 Union Trust Bldg., Washington, D. C.**
**Josiah Ferris, Manager**

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
F. M. Burley, Jr., Youngsville, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

# UP FRONT WITH THE LEAGUE

*by A. W. Dykers*

### The Old Mule

Our market character, the Old Mule is in quite a predicament. At the present time he has two drivers, the Sugar Division and the State Department, who are, most assuredly, not charter members of the society for the prevention of cruelty to old mules and, if the latest bill reported out by Mr. Cooley's House Agriculture Committee becomes a law, he will have three!

Mr. Cooley's Committee has voted to give the Administration authority to cancel the extra "windfall" sugar quota that would go to the Dominican Republic "if the cancellation is approved by a two-thirds vote of the Organization of American States (OAS) before October 15."

We join with our 10,400,000 ton sugar toter in saying "woe is me."

### A Special Meeting

On page 308 of this issue of The Sugar Bulletin you will see a notice concerning a special meeting of the League membership, together with a proxy, to which we hope you give your special attention.

The Executive Committee of the League recently voted, along with other minor changes, to recommend enlargement of its membership to allow for a more complete coverage of all segments of the Louisiana sugar industry. The League's attorney says this special meeting is necessary to legalize the recommendations of the Executive Committee.

The writer understands that the main purpose of the special meeting is to give the membership opportunity to elect more independent cane growers to the League's Executive Committee.

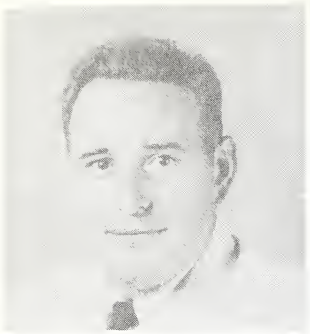
### I.S.S.C.T. Copies Ready

Dr. R. P. Humbert, Chairman of the Program and Publications Committee of the Tenth Congress of the International Society of Sugarcane Technologists, held in Hawaii in 1959, has announced that the Elsevier Publishing Co., of Holland, is now distributing copies of the proceedings of the Conference to the membership

(Continued on page 312)

## *In This Issue*


Up Front With The League ..... 305
**The Old Mule—A Special Meeting—I.S.S.C.T. Copies Ready—No Marketing Allotments**
In The Field With Lloyd L. Lauden ..... 306
**Don't Forget Stunting Disease**
Warning ..... 306
In Washington With Joe Ferris ..... 307
**Sugar Legislation Again**
Notice Of Special Meeting ..... 308
Proxy For Special Meeting ..... 308
1960 Sugarcane Variety Recommendations For Louisiana ..... 309
Some Varietal Characteristics Of The More Important Commercial Varieties ..... 310



# IN THE FIELD WITH LLOYD LAUDEN

*by Lloyd L. Lauden*

## Don't Forget Stunting Disease

Stunting disease is still in far too many Louisiana cane fields and growers are taking a loss. This virus disease does not show itself with highly apparent outward symptoms as is the case with other diseases, but the loss is there and this becomes very obvious when diseased cane is compared with clean cane.

During the past two years growers have heard a considerable amount about the importance of Mosaic disease and much progress has been made toward its control, but growers should not forget the importance of Stunting disease. Experiments conducted by the scientists of L.S.U. and the U.S.D.A. since 1953 have proved beyond any doubt that Stunting disease causes losses of 3 to 7 tons of cane per acre. With a highly susceptible variety, such as C. P. 43-47, losses have been considerably higher.

Today there are approximately 100 heat treating units in the sugar belt. Some of these have been used to the maximum during most years. Others have not been operated to the maximum either because of adverse weather conditions during the recommended treating period or because the size of the farm did not require maximum operation. Many growers who have heat treating units have sold heat-treated cane to friends and neighbors. More of this can be done.

Growers should continue to treat enough seed each year for seed plots for future commercial planting. One acre treated this year will plant approximately seven acres of seed next year, and from this about 50 acres can be planted the following year for the mill. Growers should continue to treat each year one acre of seed for approximately every fifty acres of cane to be planted. By doing this the grower will always have good clean seed.

Growers should also continue to follow the recommendations for heat treating cane for the control of Stunting disease. The complete recommendations can be gotten from the County Agents. Growers should pay particular attention to the recommended temperatures for treatment. It is recommended that the ingoing air temperature be 58°C for all varieties except C. P. 44-101. The temperature recommended for C. P. 44-

(Continued on page 312)

### *WARNING*

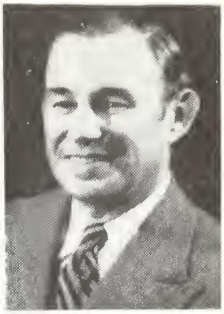
**Endrin should not be applied to cane later than 45 days before harvest of *that* cane.**

**This is a government regulation and should not, *under any circumstances,* be violated. To do so could bring serious trouble to the entire Louisiana sugar industry.**

***Lloyd L. Lauden***

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*



## Sugar Legislation Again

The Sugar Legislative pot came to a quick boil when Representative Harold Cooley, Chairman of the House Committee on Agriculture, introduced a bill (#13062) to extend the present sugar act until December 31, 1961. The Bill also contained a provision previously passed by the House last July but which was dropped in conference, providing that most of any increase in proportionate shares in any area would go to new producers.

The House Committee was in executive session considering the Cooley bill with the view to reporting it out and expediting its consideration by the House under the suspension of rules, when word came from the White House that the President was sending a special message to the Congress on sugar legislation and requesting the Committee to permit Under Secretary of State Douglas Dillon to testify on the Administration proposal. Thereupon, Mr. Cooley recessed the Committee for 24 hours.

Under Secretary Dillon appeared before the Committee, August 24, in what appeared to be a vain attempt to justify the President's request for the same authority to adjust the Dominican quota that he has for the Cuba quota. The Administration also asked for an extension of the Act beyond its present termination date of March 31, 1961.

The Under Secretary spent a most uncomfortable two hours under a heavy barrage of questions from Congressman Cooley and the Democratic members of his committee. Mr. Cooley pointed out that the President and Mr. Dillon were asking Congress now to legalize the flagrant violation of the law of the land by the Administration. Cooley emphasized that the existing law provides for Dominican sugar to be purchased along with sugar from other countries and that some 322,000 short tons of sugar allocated to the Dominican Republic pursuant to the reduction in the Cuban quota has not been permitted to come to the United States. According to Dillon's testimony, such imports of sugar from the Dominican Republic would seriously embarrass the United States in the conduct of our foreign relations throughout the hemisphere. The Democrats on the Committee constantly took Mr. Dillon to task for the State Department's attitude toward a friendly Republic and pointed out that while Trujillo was no doubt a dictator, during the many years of his regime his country had been very friendly toward the United States. That Americans doing business in the Dominican Republic operated their businesses there as freely as the same business would be operated on the mainland United States.

Democrats also blamed the State Department for the present situation in Cuba. They pointed out that while Batista, the former President of Cuba, was a dictator he also was a good friend to the United States, and that Fidel Castro, whose government was recognized over night by the State Department, was a vicious enemy. Mr. Dillon did not explain to the Committee's satisfaction why the United States would invoke economic

(Continued on page 312)

TO: THE MEMBERS AMERICAN SUGAR CANE LEAGUE OF THE U.S.A. INC.

*Notice of special meeting.*

This is to notify you that at the direction of the Executive Committee the President has called a special meeting of the members of this Corporation to be held on the 29th day of September, 1960, at 10 o'clock, a.m. at the office of the Corporation, 414 Whitney Building, New Orleans, Louisiana. The purposes of said meeting are:

I. To amend the charter of this Corporation as follows:

(a) Amend Article VIII to:

1. Change the number of members of the Executive Committee to not less than twenty (20) nor more than forty (40), and until otherwise provided in the by-laws to fix the number at thirty-four (34), each being entitled to one vote, and to increase the number of committeemen to constitute a quorum.
2. Provide for the election of all officers by the Executive Committee.

(b) Amend Article IX to:

1. Revise the authority and procedure for calling special meetings of the members and Executive Committee; clarify voting and election procedure; and provide that any meeting of members and of Executive Committee may be held at any place in Louisiana designated by the Executive Committee.

(c) Delete or revise the obsolete provisions of said Articles VIII and IX and those provisions inconsistent with the amendments above proposed.

II. To transact any other business which may lawfully come before said meeting.

If you cannot attend you may vote by proxy. This meeting is on the same day as the annual meeting of the Corporation which will be held at 2:00 p.m. You should arrange to attend both meetings.

New Orleans, Louisiana
September 1, 1960

GILBERT J. DURBIN
General Manager

## PROXY

I, _____, a member of the American Sugar Cane League of the U.S.A. Inc., do hereby constitute and appoint _____, or in his absence, _____, my true and lawful proxy in my name, place and stead, to vote upon the membership owned by me and standing in my name, as my proxy, at the special meeting of the members of said American Sugar Cane League of the U.S.A., Inc., to be held on the 29th day of September, 1960, at 10 o'clock a.m., at the office of said corporation, 414 Whitney Building, New Orleans, Louisiana, or at any adjournment or adjournments thereof.

IN WITNESS WHEREOF, I have hereunto set my hand, this _____ day of _____, 1960.

_____

WITNESS:

_____

# 960 SUGARCANE VARIETY RECOMMENDATIONS FOR LOUISIANA

*Prepared jointly by personnel of the Louisiana State University Agricultural Experiment Station, Baton Rouge, Louisiana and the United States Department of Agriculture Sugarcane Field Station, Houma, Louisiana*

The following recommendations are ased primarily on results obtained n out field test plots under the super- ision of the Federal and State sta- ions over a period of several years. \t the present time C. P. 44-101 ap- ears to be the most valuable vari- ty for general planting in all areas nd on all soil types in the sugarcane istrict except in the Red River area, vhere yields of other commercial va- ieties have been above those of C. P. 4-101 and where heavy borer infes- ations are allowed to develop. It is usceptible to mosaic and seed plots hould be rogued where necessary. Vhile C. P. 44-101 is recommended enerally as the major cane, other arieties have important places in he planting program.

N. Co. 310 has given yields of cane nd sugar above those of C. P. 44-101 n both light and heavy soils, and is nore tolerant to cold, but it is later naturing. It is more likely to lodge han C. P. 44-101, but when lodged an be handled with harvester pick- p attachments with less loss than a ariety such as C. P. 36-105 which, ecause of its brittleness, breaks when the stalks are straightened by he harvest machines. It is suscep- ible to both mosaic and red rot and ane to be used for seed should be nspected for mosaic and rogued where necessary.

C. P. 52-68 has equaled C. P. 44- 101 in yields of cane and has sur- passed it in yields of sugar per ton on both light and heavy soils of the State except on Terrace soils of the Lafayette - Youngsville area and the Iberia soil series of the Teche. It is susceptible to mosaic but resistant to red rot. Cane to be used for seed should be inspected for mosaic and rogued where necessary. C. P. 52-68 will not stand cold, being equal to C. P. 36-105 in that respect.

C. P. 48-103 and C. P. 47-193 have shown superiority over both C. P. 36-105 and C. P. 44-101 in some tests. C. P. 48-103 is by far the earliest maturing variety available, and a sufficient acreage should be planted for harvest during the early part of the harvest season. C. P. 47-193 is also earlier maturing than C. P. 44-101 and should be grown on the heavier soil types; however, it does not withstand freeze injury as well as C. P. 44-101 and also has a higher inversion rating. It should therefore be harvested first. Both C. P. 48-103 and C. P. 47-193 are more resistant to mosaic than C. P. 44-101.

Many growers are still obtaining satisfactory results with C. P. 36-105, which is slightly earlier maturing than C. P. 44-101. It has responded to heat treatment for control of stunting disease. Cane grown from treated seed may be slightly lower in sugar content than that grown from untreated cane, but should produce satisfactory sucrose for medium early harvesting. It is more resistant to borer injury than C. P. 44-101 but does not withstand freeze injury as well.

C. P. 44-105, C. P. 43-47 and C. P. 36-13 are higher in sucrose than C. P. 44-101 and may be grown on well drained light soils as secondary canes where recommended below. Heat treated cane of these varieties have in some tests outyielded C. P. 44-101. C. P. 36-13 and C. P. 44-155 are more resistant to mosaic than C. P. 44-101.

Recommendations by areas are as follows:

1. Avoyelles, Rapides, upper St. Landry and Pointe Coupee Parishes:

(Continued on next page)

a. Light soils:
C. P. 48-103 for early harvesting, N. Co. 310, C. P. 52-68, C. P. 36-105, C. P. 47-193, C. P. 44-101 and C. P. 36-13.
b. Heavier soil types:
C. P. 47-193,[1] N. Co. 310, C. P. 52-68 and C. P. 44-101.

2. East and West Baton Rouge, Iberville, Ascension, lower Pointe Coupee and St. Landry Parishes:
a. Light soils:
C. P. 48-103 for early harvesting, C. P. 44-101, N. Co. 310, C. P. 52-68, C. P. 36-105, C. P. 44-155 and C. P. 36-13.
b. Heavier soil types:
C. P. 47-193,[1] N. Co. 310, C. P. 52-68, and C. P. 44-101.

3. Assumption, St. James, St. John, St. Charles, Lafourche and Terrebonne Parishes:
a. Light soils:
C. P. 48-103 for early harvesting, C. P. 44-101, C. P. 36-13, N. Co. 310, C. P. 52-68, C. P. 36-105, C. P. 44-155 and C. P. 43-47.
b. Heavier soil types:
C. P. 47-193,[1] N. Co. 310, C. P. 52-68, and C. P. 44-101.

4. St. Mary, Iberia and St. Martin Parishes:
a. Light soils:
Limited plantings of C. P. 48-103 for early harvesting, C. P. 44-101, N. Co. 310, C. P. 52-68, C. P. 36-13, C. P. 44-155 and C. P. 36-105.
b. Mixed and heavier soil types:
C. P. 47-193,[1] N. Co. 310, C. P. 52-58 and C. P. 44-101.

5. Lafayette, Vermilion and terrace soils in St. Landry Parishes:
a. Light soils:
C. P. 44-101, N. Co. 310, C. P. 36-13 and C. P. 44-155.
b. Mixed and heavier soil types:
C. P. 47-193,[1] N. Co. 310 and C. P. 44-101.

[1] C. P. 47-193 is listed first for these soil types because it is earlier maturing and does not withstand freeze injury as well as C. P. 44-101. It should be harvested first. N. Co. 310 and C. P. 44-101 are higher yielding.

## SOME VARIETAL CHARACTERISTICS OF THE MORE IMPORTANT COMMERICAL VARIETIES

*C. P. 44-101:* This variety remains Louisiana's most important cane. It is being grown on 48.01 per cent of the acreage planted to sugarcane. C. P. 44-101 is one of the varieties used by researchers as a basis for comparing other varieties in the breeding and selection program. Its good milling quality makes it a desirable cane.

*Advantages*

1. Produces well on both light and heavy soils
2. Stands erect
3. Medium to late maturing
4. Relatively cold tolerant
5. Tolerant to most herbicides.

*Disadvantages*

1. Susceptible to mosaic
2. Susceptible to borers.

*N. Co. 310:* A cane that has gained considerable popularity and is presently grown on 21.03 per cent of the cane acreage. It is a very good producer; but, its extreme susceptibility to mosaic must be considered very carefully before increasing its acreage.

*Advantages*

1. High producer on both light and and high soils
2. Adapted to pick-up attachment harvesting
3. Excellent cold tolerance
4. Moderately resistant to borer damage
5. Good milling qualities.

*Disadvantages*

1. Highly susceptible to mosaic
2. Lodges severely
3. Late maturing
4. Moderately susceptible to red rot
5. Susceptible to Dalapon injury.

*C. P. 36-105:* Acreage wise it ranks as the number three cane, being

lanted on 10.32 per cent of the total ugarcane acreage. It is one of the arieties that has responded well to eat treatment for the control of atoon stunting disease.

*Advantages*

. Medium early in maturity
. Good on light soils when treated
. Erect
. Average susceptibility to borers
. Tolerant to most herbicides
. Moderately resistant to mosaic.

*Disadvantages*

. Very brittle
. Lacks cold tolerance
. Inverts rapidly
. Has poor milling qualities.

*C. P. 44-155:* A cane of vigorous rowth, good suckering ability, but lightly crooked.

*Advantages*

. Good sucrose
. Produces well on light soils
. Moderately resistant to red rot
. Good milling qualities
. Very low inversion rating.

*Disadvantages*

. Not as high yielder as C. P. 44-101 particularly in stubble
. Susceptible to borer damage
. Lodges
. Moderately tolerant to Dalapon.

*C. P. 48-103:* It is the earliest maturing variety now available for commercial production. Because it lacks vigor, it should be planted on the better light soils free of a grass problem. It is presently being grown on .01 per cent of the State's acreage planted to cane.

*Advantages*

. Early maturing
. High sucrose
. Resistant to mosaic
. Moderately resistant to red rot
. Good milling qualities
. Satisfactory inversion rating.

*Disadvantages*

. Low vigor
. Low yield in tons per acre
. Susceptible to borer injury
. Susceptible to Dalapon injury.

*C. P. 36-13:* Should increase in popularity due to its positive response to heat treatment for control of stunting disease and its resistance to mosaic. It is presently being grown on 2.62 per cent of the State's cane acreage.

*Advantages*

1. Resistant to mosaic
2. Good sucrose
3. Erect
4. Resistant to red rot
5. Good milling qualities.

*Disadvantages*

1. Susceptible to borers
2. Not tolerant to Dalapon
3. Should be planted early.

*C. P. 47-193:* This variety is an early maturing variety ranking below C. P. 48-103 in that respect. Presently, it is being grown on 2.72 per cent of the cane acreage, principally on heavy soils.

*Advantages*

1. Early maturity
2. Very erect
3. Resistant to mosaic
4. Resistant to red rot
5. Fair milling qualities.

*Disadvantages*

1. Lacks cold tolerance
2. Inverts rapidly
3. Susceptible to borer injury
4. Susceptible to Dalapon injury.

*C. P. 43-47:* Is one of the older varieties which has responded extremely well to heat treatment for ratoon stunting disease. It is still one of the better adapted varieties to mechanical harvesting.

*Advantages*

1. Relatively good sucrose
2. Good on light soils
3. Moderately resistant to red rot
4. Fair milling qualities
5. Fair inversion rating
6. Erect.

*Disadvantages*

1. Not a high yielder
2. Average susceptibility to borers
3. Not very tolerant to Dalapon
4. Moderately susceptible to mosaic.

*C. P. 52-68:* One of the most prom-

(Continued on next page)

ising newly released varieties. Should establish itself as a major cane if it can be kept free of mosaic.

*Advantages*

1. Good yielder
2. Medium early in maturity
3. Good on both light and heavy soils
4. Resistant to red rot
5. Very erect
6. Fair milling qualities
7. Fair inversion rating.

*Disadvantages*

1. Susceptible to mosaic
2. Average susceptibility to borers
3. Moderately tolerant to Dalapon
4. Lacks cold tolerance.

———o———

## UP FRONT

(Continued from page 305)

of the Society.

Dr. Humbert, who is the Western Director of the American Potash Institute, Inc., with headquarters at 314 First National Bank Building, San Jose 13, California, advises that the Proceedings are printed in one volume of 1,174 pages with 403 illustrations and 338 tables and should prove a valuable reference for all persons interested in sugar technology.

### No Marketing Allotments

The Sugar Branch has officially announced that there will be no marketing allotments for the Louisiana and Florida sugar cane processors this year. Since it is a well known fact that after years of attrition we cannot even come close to producing the 773,873 tons of sugar that have been alloted the Domestic Cane Area, we presume that no one will be surprised to learn that mill marketing allotments will not be necessary. However, for the record, the ruling became official when it appeared in the Federal Register of August 23rd.

———o———

## IN THE FIELD

(Continued from page 306)

101 is 59°C. The recommended treating period is eight hours. Growers should not overload the unit. When the unit is properly loaded, it will contain about one ton of cane. Spac should be left between the bars of th loading rack for proper air movemer for the treatment. If the racks ar loaded too heavily, poor air distribu tion will occur and poor disease cor trol will result. Don't stack the rack too tightly!

Select seed clean of Mosaic diseas for heat treating and plant this treat ed seed away from varieties whic are heavily infected with Mosaic dis ease. Several heat-treated seed plot were discarded and not used for see last year because of Mosaic disease.

After the seed is treated and plant ed, growers must remember that thi cane is very important and must b handled carefully during cultivatio to prevent possible recontamination

———o———

## IN WASHINGTON

(Continued from page 307)

sanctions against the friendly Do minican Republic before invokin them against Cuba. Committeemer commented that communism is ram pant in Cuba, whereas it is prac tically unknown in the Dominica Republic.

Mr. Dillon admitted that the Do minican sugar was needed to mee our requirements and without it w might be short.

At the conclusion of Mr. Dillon's statement, the Agriculture Commit tee took another 24 hours recess, wit representatives from the Agricultur Department and South Puerto Ric Sugar Company scheduled to appea August 25 and 26.

It is common knowledge that there is a wide difference of opinion between the Departments of Agriculture and State on the Dominican sugar question. The Department of Agriculture maintains that the Dominican sugar is necessary to assure adequate supplies in the United States during the first and second quarters of next year, when no Cuban sugar will be available, should the President exercise his authority to eliminate entirely the Cuban quota.

As the matter stands now, it ap-

ears that the Committee vote will e along party lines, the Democrats aying Dillon's testimony was "ter- ible", and the Republicans saying it vas "fine". If the Cooley bill goes o the Senate without the Presiden- ial authority to eliminate the Do- inican sugar quota, there seems to e a good chance that the Senate will ass the bill promptly, and thus ex- end the Act through December 31, 961. However, if the Administra- ion insists on the Presidential au- hority provision, the odds are great- y against any sugar legislation dur- ng this special session.

Hot weather, hot tempers, and a ot political campaign are causing an pidemic of restlessness among mem- ers of Congress, many of whom are lready packing bags and making eservations for the great exodus rom Washington before the Labor )ay holiday begins.

—o—

### )ID YOU KNOW . . . ?

That since 1937 there has been a et return to the U. S. Treasury on he sugar program of over $400,- )00,000.?

### )ID YOU KNOW . . . ?

That, quota-wise, the cane sugar efiners receive more protection un- der the Sugar Act than any other segment of the domestic sugar in- dustry?

### *DID YOU KNOW . . . ?*

That the retail price of sugar in the U. S. is nearly 5 cents a pound below the median price in 121 coun- tries around the globe?

### *DID YOU KNOW . . . ?*

That, according to the United Na- tions, Denmark consumes 118 pounds of sugar per person and that this is the second largest per capita sugar consumption in the world?

### *DID YOU KNOW . . . ?*

That Iceland has the sweetest tooth in the world with a per capita con- sumption of 122 pounds?

---


*"Sugar Factory Insurance Specialists"*

**GILLIS, HULSE and COLCOCK, Inc.**

839 Union St. New Orleans, La.

Telephone JA 2-1225



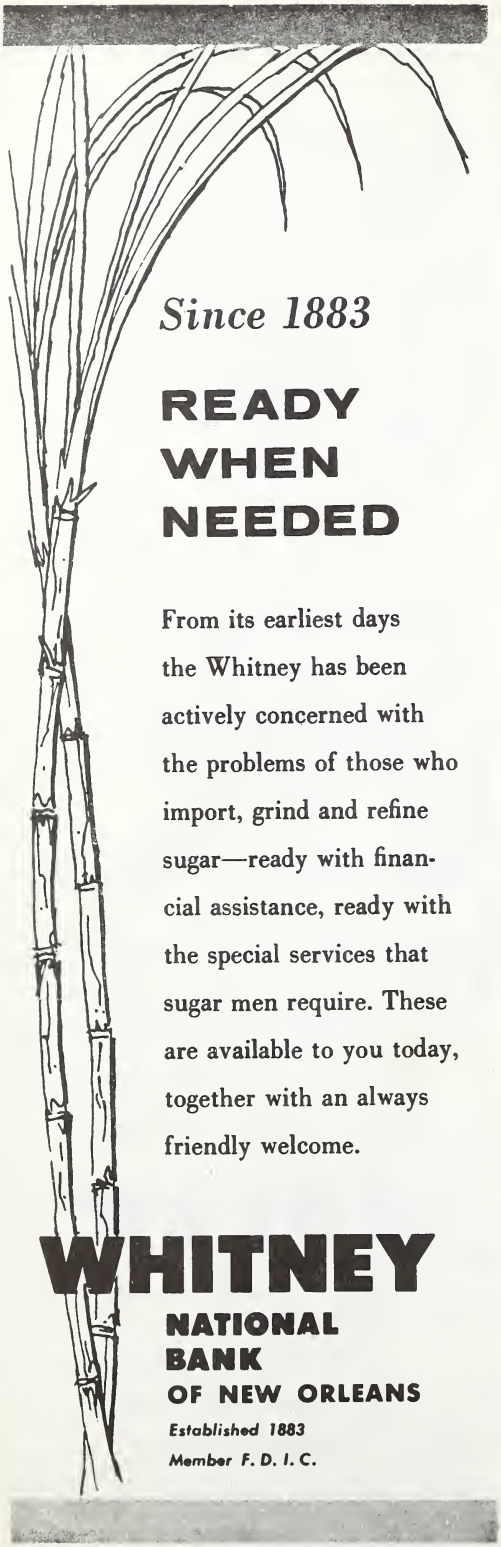
**Cane Master**

THE MARK OF QUALITY

J AND L

- HARVESTERS
- LEVELERS
- CANE TRAILERS
- STUBBLE SHAVERS
- LOADERS
- CARTS
- MECHANICAL HOES
- DRAIN CLEANERS

**J. &. L. ENGINEERING CO., INC.** **Jeanerette, Louisiana**


Since 1883
READY
WHEN
NEEDED
From its earliest days the Whitney has been actively concerned with the problems of those who import, grind and refine sugar—ready with financial assistance, ready with the special services that sugar men require. These are available to you today, together with an always friendly welcome.
WHITNEY
NATIONAL
BANK
OF NEW ORLEANS
Established 1883
Member F. D. I. C.

## Commercial Members of the AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC.

AMERICAN MOLASSES CO., OF LOUISIANA, INC.
400 N. Gayoso St.
New Orleans, La.

HARRY L. LAWS & CO., INC.
126 Carondelet Street
New Orleans 12, La.

THE HIBERNIA NATIONAL BANK
New Orleans, La.

LAMBORN & COMPANY, INC.
Whitney Building
New Orleans, La.

LEBOURGEOIS BROKERAGE CO.
823 Perdido Street
New Orleans, La.

THE NATIONAL BANK OF COMMERCE
New Orleans, La.

NATIONAL SUGAR REFINING CO.
Carondelet Bldg.
New Orleans, La.

PENICK & FORD LTD., INC.
National Bank of Commerce Bldg.
New Orleans, La.

ESSO STANDARD OIL COMPANY
(Louisiana Division)
P. O. Box 1250 New Orleans 10, La.

STANDARD SUPPLY & HARDWARE CO., INC.
822 Tchoupitoulas St.
New Orleans, La.

STATE AGRICULTURAL CREDIT CORP., INC.
837 Whitney Building
New Orleans, La.

WHITNEY NATIONAL BANK
New Orleans, La.

33.61
U35
2.1
La. State University Library
Acquisitions Dept.
Baton Rouge 3, La.

# THE SUGAR BULLETIN

l. 38 — No. 24 SEPTEMBER 15, 1960

*icial Bulletin of the American Sugar Cane League of the U. S. A.*

Announcing The

## THIRTY-EIGHTH ANNUAL MEETING

of the

## AMERICAN SUGAR CANE LEAGUE

of the

## U. S. A., Inc.

## THURSDAY, SEPTEMBER 29th, 1960

UNIVERSITY ROOM, ROOSEVELT HOTEL
123 Baronne Street
New Orleans, La.
Meeting Convenes at 2:00 P. M.

At this meeting there will be an election of Members of the Executive Committee to serve during the ensuing year.

**All Members of the League Will Please Consider This as an Official Notice To Attend**

Published on the First and Fifteenth of each month
in the interests of the Domestic Sugar Cane Industry

THE
# SUGAR BULLETIN

414 Whitney Bldg., New Orleans 12

Gilbert J. Durbin, Editor — Andrew W. Dykers, Managing Editor

Lloyd L. Lauden, Agronomist and Field Representative

**The Official Organ of the American Sugar Cane League of the U. S. A.**

Second Class mail privileges authorized at New Orleans, La., April 13, 1925

**Issued on the 1st and 15th of each month.** **Subscription: Member 50 cents a year. Non-Members $3.00 a year.**

**Washington Office, 510 Union Trust Bldg., Washington, D. C.**
**Josiah Ferris, Manager**

**OFFICERS OF THE SUGAR CANE LEAGUE**

President, Warren Harang, Jr., Thibodaux, La.

Ed. Schexnayder, White Castle, La.
1st Vice-President

T. M. Barker, Lockport, La.
2nd Vice-President

Andrew P. Gay, Plaquemine, La.
3rd Vice-President

Josiah Ferris, Washington, D. C.
4th Vice-President

Gilbert J. Durbin, New Orleans, La.
5th Vice-President and Gen. Mgr.

F. Evans Farwell, New Orleans, La.
Treasurer

J. J. Shaffer, Jr., Rt. 2, Box 733, Houma, La.
Secretary

**EXECUTIVE COMMITTEE**

Thomas H. Allen, Franklin, La.
P. L. Billeaud, Broussard, La.
H. K. Bubenzer, Bunkie, La.
F. M. Burley, Jr., Youngsville, La.
W. S. Chadwick, New Orleans, La.
J. P. Duhe, Jeanerette, La.
Murphy J. Foster, Franklin, La.
F. A. Graugnard, Jr., St. James, La.
John B. Levert, New Orleans, La.
Clifford LeBlanc, White Castle, La.
Earl G. Luke, Franklin, La.
Richard McCarthy, Jr., New Orleans, La.
E. W. McNeil, Cinclare, La.
J. J. Munson, Houma, La.
Charles C. Savoie, Belle Rose, La.
Bronier Thibaut, Napoleonville, La.
James H. Thibaut, Donaldsonville, La.
Ivan M. Wilbert, Plaquemine, La.
Horace Wilkinson III, Port Allen, La.
M. V. Yarbrough, Youngsville, La.

**HONORARY MEMBERS**

L. A. Borne, Raceland, La.
Wallace C. Kemper, New Orleans, La.
David W. Pipes, Jr., Houma, La.

*We stand for the encouragement of Home Industries as against Foreign Competition*

LOUISIANA STATE UNIVERSITY LIBRARY

# UP FRONT WITH THE LEAGUE

*by A. W. Dykers*

### Annual Meeting

The Annual Meeting of the American Sugar Cane League will be held this year, as called for by the Charter, on the last Thursday in September which is September 29th. The place will be the University Room of the Roosevelt Hotel in New Orleans and the time is 2 o'clock in the afternoon. The official notice of this meeting is on the cover page of this issue. Be there if you can.

### Special Meeting

We again call the attention of the members of the League to the *Special Meeting* of the membership that will be held in the office of the League, 414 Whitney Building, in New Orleans at 10:00 A.M. on September 29th, which is the same day the Annual Meeting will be held.

This meeting is for the purpose of allowing the membership to vote on a proposal to increase the size of the Executive Committee *before* nominations are presented to the Annual Meeting. If you cannot attend this meeting, give your proxy to someone who will be present. For your convenience we are repeating on page 325 the proxy that appeared in the September 1st issue of *The Sugar Bulletin*.

### Jules Burguieres

It is with sincere regret that we record the death of Mr. Jules M. Burguieres. Mr. Burguieres died while attending a special meeting of the police jury in Franklin, La. on September 7th, 1960. He was 78 years old.

We liked "Mr. Jules" and we are happy in the thought that he liked us. He and his brother Ernest, who passed away a little over a year, were frequent visitors to the League office and it was always a great pleasure to talk with them and absorb some of the vast store of knowledge concerning the Louisiana sugar industry in general, and St. Mary Parish in particular, they both possessed.

The St. Mary and Franklin *Banner-Tribune* says Jules M. Burguieres "died the way he lived—trying to help build a greater St. Mary Parish" and we believe every word of it. We, and they, have lost a real champion.

### High Yields Awards

As has been the custom in recent years, the high yield awards activi-

(Continued on page 326)

## *In This Issue*

Up Front With The League ..... 317
**Annual Meeting—Special Meeting—Jules Burguieres—High Yields Awards—King Sucrose**
In The Field With Lloyd L. Lauden ..... 318
**Condition of the Crop**
In Washington With Joe Ferris ..... 319
**No New Sugar Legislation**
Breeding In Sugarcane With Special Reference To Kinds Of Material ..... 320
Control Of Johnson Grass On Smithfield Plantation ..... 323

# IN THE FIELD WITH LLOYD LAUDEN

*by Lloyd L. Lauden*

### Condition of the Crop

The Louisiana sugar industry was indeed fortunate to have missed the horrors of Hurricane "Donna." She would have caused almost unbelievable damage to cane this year. The effect of this hurricane would have been far more severe than those of the past. The rapid growth following the rains has caused the cane to be unusually brittle. Donna's ill winds would have broken and topped most of the crop.

Reports from several growers who have begun planting operations indicate that cane is planting at a good rate. Planting rates of as high as 7 to 1 have been reported during early September. These good planting rates probably came from some of the best seed cane on the plantations and cannot be used as a positive basis to decide what the crop will yield. However, this is an indication that stalk population per acre is good. Reports from growers who keep stalk count records show that the crop suckered well and that stalk population now is better than normal. A high stalk count per acre plus good barrel size or stalk diameter can do much to offset the effect of the shortness of this crop. Stalk diameter appears good at this time generally throughout the belt.

Many growers are increasing C. P. 52-68 rather heavily this planting season. The variety withstood the drought well and is generally taller than other varieties at this time. C. P. 52-68 is a good variety which is generally adapted to both light and heavy soils over most of the belt. Growers must remember that the variety is susceptible to mosaic disease and seed cane must be checked and, if necessary, rogued each year or the disease will build up rapidly.

Growers are continuing to plant heavily the old stand-by, C. P. 44-101. It will probably occupy at least 40 per cent of the 1961 crop. Most growers like C. P. 44-101 because it can be depended upon to yield good stubble crops.

N. Co. 310 has made good growth this year and stands are generally better than stands were in the variety in 1959. Many growers are planting 25 to 35 per cent of the acreage to N. Co. 310. Growers like this variety because it generally makes good yields in both plant cane and in stubble cane. It is very susceptible to mosaic disease. Growers should carefully check seed cane each year for mosaic disease and rogue if necessary.

C. P. 36-13 and C. P. 47-193 are being used as a buffer or fence between mosaic diseased and clean cane. This is an excellent practice. The two varieties are resistant to mosaic disease.

Growers are again reminded that the planting job is the most important operation on the farm. Do this job carefully, after good planning, and chances for good yields next year will be better.

# IN WASHINGTON WITH JOE FERRIS

*by Josiah Ferris*

### No New Sugar Legislation

The so called "Do-nothing" 86th Congress labored mightily over a mountain of sugar bills and delivered a tiny little mouse, destined to live only 90 days.

Congressional action taken July 3, after twenty-two and one half hours of continual debate, extended the Sugar Act for a period of 90 days, from December 31, 1960, to March 31, 1961, and gave the President authority to adjust, up or down, Cuba's participation in the U. S. market.

The August session did not produce any change in the status of the sugar legislation passed in July, although many precious hours were wasted in bitter partisan fighting over the President's request for authority to adjust the Dominican Republic's sugar quota.

After several days of hearings before its Committee on Agriculture, the House of Representatives finally passed and sent to the Senate a bill which would have extended the Sugar Act to December 31, 1961, and permitted the President limited authority to cut the Dominican quota.

The Senate Finance Committee quickly convened, and in an unusual Executive Session reported, with very minor changes, the House bill and sent it immediately to a waiting Senate.

Senators Ellender and Russell Long of Louisiana, Holland and Smathers of Florida, and Anderson and Chavez of New Mexico, eloquently advocated quick passage of the Bill as reported by the Finance Committee. But the Republican Minority Leader, Dirksen, obtained the Floor and in an impassioned and very dramatic speech got consent to substitute the Administration's original proposal for complete Presidential authority to juggle the Dominican quota. At the conclusion of Senator Dirksen's speech, word was circulated throughout the Senate Chamber that both Senators Kennedy and Johnson were for the Republican bill. Consequently, the vote was overwhelmingly in favor of the substitute bill.

By taking action so drastically different from that by the House, the Senate angered the House Democratic leaders to such an extent that they refused to go to conference, and thereby reconcile the differences between the House and Senate versions of the sugar legislation.

Like smarty juveniles who had flaunted parental authority, Congressional leaders apparently were afraid to adjourn and go home. They feared the President might insist on having his sugar bill passed and send another special message on that subject to Congress. But after listening for several hours to partisan speeches, Senator Dirksen announced that while the President was extremely disappointed, he would make no further attempt on behalf of his bill. The Board of Directors of the greatest corporation in the world zippered up their brief cases and stole away until January 3, 1961.

In baseball parlance; no hits, no runs, but oh!, those errors!

# BREEDING IN SUGARCANE WITH SPECIAL REFERENCE TO KINDS OF MATERIAL

*By Dr. M. T. Henderson, Louisiana State University*
*Presented at the meeting of the American Society of Sugarcane Technologists at Thibodaux, Louisiana, June 2, 1960*

Sugarcane appears to be native to southeast Asia and islands off the coast. It is known from records to have been grown as an economic plant in that part of the world for at least 2,500 years and undoubtedly its use preceded that date by several hundred, perhaps several thousand, years. It is also of interest that, although several species of the genus Saccharum have been found, all species are native to the same rather limited area. Unlike many other genera of plants, the genus Saccharum was not widely distributed in its native habitat. There are no species which are native to the New World, Europe, Africa, or even Hawaii and Australia.

In fact, the growing of sugarcane outside southeast Asia and such islands as Java, Ceylon, and New Guinea is a relatively recent development, with introduction into southern Europe between 700 and 750 A.D. Of course, its production in the New World did not come until the colonization period in the West Indies and South America following the discovery.

One fact of considerable significance in the breeding of sugarcane is that the original cultivated species, *Saccharum officinarum,* has extremely little genetic variation among existing varieties or clones in contrast to the large number of genetically different varieties of such plants as rice and wheat which were in existence long before modern plant breeding began. In fact, the early history of sugarcane production in southern Europe and the New World before 1800 was based almost entirely on a single clone or variety, Creole, which apparently came originally from India. In the early 1800's, a few additional varieties, such as Black Cheribon (La. Purple) and Preanger (La Striped) were introduced from Java and other islands of that region. However, as late as the 1920's, most of the world production of sugarcane was based on not more than 8 or 10 clones of the species *S. officinarum.* At the same time, thousands of genetically distinct varieties of rice and wheat were already being grown. This extremely narrow range of variation among varieties of sugarcane was due undoubtedly to its vegetative propagation, which does not permit much genetic variation to occur naturally.

In the modern system of taxonomy or classification, five species of Saccharum, or sugarcane, are recognized. Three of these are cultivated species—*S. officinarum* (noble cane), *S. barberi* and *S. sinense*—and two species, *S. spontaneum* and *S. robustum,* are wild forms. Although valueless for agricultural production, the wild species have been of great importance in the improvement of cultivated sugarcane through plant breeding.

Modern sugarcane breeding may be considered to have begun with the discovery about 1890 that the plant is capable of producing viable seeds. Prior to that time all breeding was based on selection in clones under vegetative propagation, which leads to very slow change of an uncertain nature. The utilization of true seeds allowed the cane breeder to take advantage of the much greater genetic variation that is possible from sexual reproduction. However, there was a long period of trial-and-error effort after the recognition that sugarcane produces true seed before an effective breeding method based on sexual reproduction could be devised.

For many years after the discovery

f seed, sugarcane breeding was limted primarily to open pollinated seed rom the leading agricultural varieies of noble cane, *S. officinarum.* 'his was a natural procedure to adopt ut unfortunately it led to very little mprovement although tried on a vide scale by many experiment staions. The main reason for limited uccess from open pollinated seed of oble varieties was probably the very arrow range of genetic variation vithin *S. officinarum,* a condition mphasized earlier. Although noble ane is highly superior in such traits s sucrose content, fiber content and ize of barrel, none of the varieties f this species possesses genes for esistance to the major diseases of ugarcane or for adaptability to subropical regions.

Failure to obtain many superior ew varieties from open pollinated eed of noble varieties had a profound ffect on the early history of sugarane breeding. This method was bandoned and breeders were forced, more-or-less, at an early date, into he use of hybridization between speies in an attempt to improve noble ane. It is apparent now that this rocedure was essential in the breedng of sugarcane.

It is generally known that interspecific hybridization in sugarcane reeding was begun in Java shortly efore 1900. The first hybrids were between varieties of noble cane and the Chunnee variety, belonging to the cultivated species *S. barberi,* from India. The objective was to combine resistance to the sereh disease from Chunnee with desirable characteristics of noble canes. The Java experimenters were only partially successful in meeting this objective. Several varieties were released from these crosses, including P.O.J. 36, P.O.J. 213, and P.O.J. 234, but they were never successful in Java. However, these were introduced into other countries where they were grown extensively for a period. These were the P.O.J. varieties which were brought into Louisiana in the 1920's and helped save the sugar industry here.

It is ironic that failure of the crosses between Chunnee and noble varieties to produce types which were acceptable for growing in Java forced sugarcane breeders there into another, more difficult, type of hybridization which led, however, to development of the most valuable material yet produced in sugarcane breeding—hybrids with the wild species *S. spontaneum.* Like many successful ventures, however, this research was characterized by failures and unpromising results during the earlier phases. Perhaps it only appears that the most valuable results have been achieved from research that seemed unpromising for a long time but there are numerous examples of this phenomenon.

About 1890, a large, vigorous wild form of sugarcane, known as Kassoer, was collected in Java and found from observations to be immune to the sereh disease. This wild form differed considerably from common wild *S. spontaneum* and was considered for many years to represent a separate species but in 1915 Jeswiet proposed that Kassoer is a natural hybrid between the Java form of *S. spontaneum* and a variety of noble cane, Black Cheribon (La. Purple), that had become established in nature. During the period 1893-1915, several workers in Java made numerous crosses between Kassoer and various varieties of noble canes in an attempt to utilize its immunity to sereh disease. It is apparent that this was done without recognition that the Kassoer parent was a hybrid and that the crosses constituted what is known in plant breeding as the first backcross to the parent species *S. officinarum.* Although carried out on an extensive scale, none of the noble cane X Kassoer offspring proved to be suitable for agricultural production because, although many were immune to sereh, all possessed inferior traits from the wild Kassoer parent. Thus, the results from the first 20 years of this line of research

were highly unpromising and each worker who made these crosses soon abandoned the procedure.

Despite the unpromising nature of the progeny from crosses between noble canes and Kassoer, attempts to obtain something of value from them were continued intermittently, probably because no other breeding technique was successful in solving the sereh problem. Then, in 1916 Jeswiet modified the approach somewhat by crossing sereh immune offspring from Kassoer X noble hybrids with noble cane varieties rather than continuing to cross Kassoer itself with the nobles. This step represented the second backcross to noble and would be expected to produce progeny which resembled noble cane more closely than did the first backcross offspring. The results showed immediate promise. Many progeny from the second backcross were not only immune to sereh, an immunity derived originally from the wild species *S. spontaneum* through Kassoer, but resembled noble cane sufficiently in other traits to be grown agriculturally. Some of the varieties derived from this second backcross were P.O.J. 2714, P.O.J. 2725, P.O.J. 2878, and P.O.J. 2883. P.O.J. 2878 quickly became the leading variety in Java. These varieties were later introduced into other tropical countries and became highly important there. The procedure came to be called "nobilization".

Although the P.O.J. varieties developed from Kassoer hybrids were not well adapted in such subtropical areas as Louisiana, they, along with the earlier varieties from Chunnee hybrids and varieties developed in India by the nobilization procedure from crosses between noble canes and an Indian form of *S. spontaneum*, proved to be extremely valuable as parental material for breeding programs in those areas. Virtually all of the C.P. varieties that have been grown in Louisiana trace back to these three sources, all representing interspecific hybridization. Of importance in the breeding program in Louisiana, the interspecific hybrids were found to be resistant to other diseases, such as mosaic and red rot and to be earlier in maturity than noble cane, a characteristic which improved their adaptability to this subtropical region. The major variety C.P. 34-120 had in its parentage three major sources of superior genes from interspecific hybrids—*S. spontaneum* of Java through Kassoer, Chunnee through P.O.J. 213 and *S. spontaneum* of India Co. 281. Thus for the past 25-30 years, sugarcane production in Louisiana has been based on varieties developed from interspecific hybrids made in Java and India.

The remarkable success from early trial-and-error use of hybridization between species before there was an understanding of the material being utilized suggests that even greater improvement might be realized from application of our current knowledge concerning principles of genetics, cytogenetics and plant breeding. As pointed out earlier, the varieties which we grow now trace back to two species in addition to *S. officinarum, S. barberi,* and *S. spontaneum.* However, only two forms of *S. spontaneum* were involved in the material, the Java form and one from India. It is recognized now that many other forms of the wild *S. spontaneum* occur in India, Burma, Sumatra, and other areas. These other forms differ genetically from the two used previously and probably contain genes that would be of value in a cultivated cane for Louisiana. Little is known concerning the potential value of the other wild species, *S. robustum,* for the improvement of sugarcane. It is the feeling of the speaker that other wild forms of the genus Saccharum could probably be utilized in the breeding of sugarcane and that fundamental research in this field designed to determine the value of other wild forms would be worthwhile.

# CONTROL OF JOHNSON GRASS ON SMITHFIELD PLANTATION

*By Louis L. Arceneaux, Manager, Port Allen, Louisiana*
*Presentation at the meeting of the American Society of Sugar Cane Technologists, Thibodaux, Louisiana, June 2, 1960*

For several years it was almost impossible to grow any row crops economically on Smithfield Plantation, because of it having a very serious Johnson grass infestation. Therefore, it was essential to inaugurate a control and eradication program of this grass.

In the spring of 1953, we set up a Johnson grass control and eradication program, with a system of fallow plowing and spring smother crops on lands following cane harvest. This method was encouraging, but results were not the best obtainable, mostly because very often stand failures were noticed in cover crops. However, this practice was continued for a period of a few years.

In the fall of 1956, in conjunction with our Johnson grass control program we introduced Mr. F. Evans Farwell's Clover System. In this system Alba Clover was planted using varieties Florana and Hubam on large acreage basis. The clover was planted following plowing out of stubble cane after harvest at seeding rates of about 15 to 18 pounds per acre.

This rather early planting of Alba Clover, customarily results in good stands and early development of root system minimizing freeze damage during winter. Our observation has been that a rank, heavy cover of clover during the winter and spring suppresses and retards development of Johnson grass that very few plants are noticeable during months of March, April, and May. In the latter part of May and early June, the clover has matured and dying falls down and causes a heavy close lying blanket of clover which continues to retard any appreciable grass growth. At or about this time, the fallow plowing process is resumed and continued as in previous years, replowing as Johnson grass growth requires.

In our fallow plowing practices, the first step is to plow under clover, by use of 16 inch, three or five bottom turn plows, keeping plows penetrating very deep. Following this operation, land is disked and harrowed. Should it be permissible land is replowed, flushing it to center of cut, again using 16 inch, three or five bottom turn plows. Then land is rechopped and again harrowed with spring tooth harrow, followed by laying off of rows, at width of 5 feet 10 inches. Then the land is row plowed at intervals, up to time of fall cane planting.

Our four years experience planting Alba Clover, indicates that the best time for planting clover is from October 15 through December 15. Any clover planted earlier than October 15, most probably will have a large percentage of seeds killed by hot sun during dry periods in late fall. Clover planted later than December 15, will in some seasons grow out its cycle. However, there are chances to be taken in not getting a normal crop of clover, should it not be planted at a proper time. Therefore, we are of the opinion that if anyone expects to get optimum results from Alba Clover all precautions should be taken to reach such goal. Certainly the clover is most beneficial to anyone in building soils and combatting all types of weeds.

In our operation we have a herd of approximately five hundred head of cattle, therefore, it is necessary to produce grass or bean hay. In order to get land to grow beans, we make a selection of areas with the least Johnson grass infestation. Prior to planting of beans, land prepara-

tion consists of capping-off stubbles to be destroyed, chopping down rows, and flushing land with three bottom disk plows. This operation is followed by disking and harrowing of land prior to planting beans. The beans are planted by use of a regular grain seeder, set to drill about seventy pounds of beans per acre. It is our policy to let the beans grow to a height of about three feet, before cutting them for baling. Of course, if for any reason we notice where Johnson grass will out grow beans, they are cut and baled before Johnson grass seeds become mature.

Following bean hay harvest, land is flushed to center of cut by use of 16 inch, three or five bottom turn plows, keeping plows penetrating very deep, then land is left undisturbed for a short period. The next step is to disk, harrow and level land in preparation for laying off rows. Once rows are laid off at a width of 5 feet 10 inches, land is plowed at intervals as grass growth requires before preparation for fall cane planting.

### Railroad Right-of-way, Headlands and Ditchbank Control

For several years headlands were contaminated with Johnson grass rhizomes and seedlings, causing a serious source of reinfestation for cultivated areas. Several methods were tried to control these areas, but response we obtained was minor. Therefore, a practice was established to chop and harrow all headlands accessible at intervals, mostly doing this work during rainy spells and after lay-by. We feel that since this method has been in practice our headlands have become free of Johnson grass.

In areas where clover, beans and fallow lands are, it is a general practice to ignore headlands and just plow through them when flat or flush plowing is done. Headlands not accessible to choppers or mowers are cut with hand blades after lay-by.

In connection with ditchbanks, we start plowing banks as close to ditch as possible, early in January, continuing this practice up to lay-by time. Plus plowing, it is customary to mow banks often and continue up to time cane gets too tall. We agree not too much has been accomplished in grass control on ditchbanks, however, any effort made to prevent seeding of Johnson grass is beneficial.

Railroad right-of-ways certainly are a menace to plantations infested with Johnson grass, because of it being a breeding area for seedlings. In respect to our area we are fortunate in having good relationship and cooperation from the railroad officials of the Texas and Pacific Railroad Co. in assistance given us in weed control on Right-of-way. All of Right-of-way crossing the Plantation are sprayed once a year, using a mixture of sodium chlorate and calcium chloride.


Cane Master
THE MARK OF QUALITY

J AND L

- HARVESTERS
- LEVELERS
- CANE TRAILERS
- STUBBLE SHAVERS
- LOADERS
- CARTS
- MECHANICAL HOES
- DRAIN CLEANERS

J. &. L. ENGINEERING CO., INC. Jeanerette, Louisiana

**Cultivation and Chemical Practices**

All stubbles where there is Johnson grass, are shaved, starting in late January or early February. In middle of February barring off of stubbles is started, using for this operation regular row plows with Pitre Hoes attached. Stubbles are off-barred at a width of sixteen to eighteen inches. Immediately following barring off plows, stubbles are sprayed with chemicals, applying twelve pounds of T. C. A. and one and a half pounds of 2,4-D per acre. At a later date middles are boxed and opened by use of a two row cultivator, preparatory to fertilization. Once stubbles have been fertilized and Johnson grass begins to be noticeable, spot spraying operations begin. Spot spray solution is prepared and applied according to L. S. U.'s chemical recommendations.

Cultivation is continued in stubbles up to lay-by time, which usually is in late May or early June. Following lay-by of stubbles a blanket spray is applied of one and a half to two pounds of 2,4-D per acre.

It is our practice to shave all plant cane, starting in early February. But the early shaved plant cane has no chemicals applied to it at time of shaving, unless the weather becomes warm and Johnson grass seeds begin to germinate. In such case four pounds of T. C. A. and one pound 2,4-D are applied per acre. When plant cane is off barred another application of chemicals follows, using five pounds of T. C. A. plus one pound and a half of 2,4-D per acre.

After the cane is fertilized it is again sprayed with T.C.A. plus 2,4-D mixture. However, in Johnson grass seedling areas, one pound of Dowpon is added per acre to T.C.A. and 2,4-D. Any Johnson grass plants remaining in plant cane after spray operation, is rogued out by use of hand hoes. Usual cultivation practices are followed in plant cane through lay-by. Following laying-by of plant cane, a blanket spray of 2,4-D, at rate of one and a half to two pounds per acre is applied. Areas which have a history of heavy Johnson grass infestations are planted with cane varieties of good shading qualities. Following such a procedure in our planting program certainly has been advantageous.

(Continued on next page)

**FOR SALE**

Foster and Wheeler 2,000 h.p. water tube boiler. 4,000 lbs. per hour. 300 S.P.I. Price reasonable.

**J. E. Howlett**
**2506 State St.**
**Phone UN 6-3682 New Orleans, La.**

## PROXY

I, _____, a member of the American Sugar Cane League of the U.S.A. Inc., do hereby constitute and appoint _____, or in his absence, _____, my true and lawful proxy in my name, place and stead, to vote upon the membership owned by me and standing in my name, as my proxy, at the special meeting of the members of said American Sugar Cane League of the U.S.A., Inc., to be held on the 29th day of September, 1960, at 10 o'clock a.m., at the office of said corporation, 414 Whitney Building, New Orleans, Louisiana, or at any adjournment or adjournments thereof.

IN WITNESS WHEREOF, I have hereunto set my hand, this _____ day of _____, 1960.

_____

WITNESS:

_____

We realize that a long time remains before Johnson grass will be eradicated on Smithfield Plantation. We do feel, however, that something has been accomplished whereby it is possible to grow a favorable crop of sugar cane.

—o—

## UP FRONT

(Continued from page 317)

ties under the auspices of the Agricultural Extension Service of L.S.U. with the cooperation of the American Sugar Cane League, will take place this year at a ceremony immediately preceeding the Annual Meeting of the American Sugar Cane League.

The featured speaker this year will be the Manager of the Washington office of the American Sugar Cane League, Mr. Josiah Ferris.

### King Sucrose

The Louisiana Sugar Cane Festival and Fair Association has announced that Mr. Martin J. Kahao, Jr. of Allendale Plantation in West Baton Rouge Parish will reign as King Sucrose XIX when the festivities are held in New Iberia on September 30th, October 1st and 2nd.

—o—

## *DID YOU KNOW . . . ?*

That the annual value of the Louisiana sugar cane crop at the first processing level is about 75 million dollars.

*"Sugar Factory Insurance Specialists"*

**GILLIS, HULSE and COLCOCK, Inc.**

839 Union St. New Orleans, La.

Telephone JA 2-1225

**Commercial Members of the AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC.**

AMERICAN MOLASSES CO., OF LOUISIANA, INC.
400 N. Gayoso St.
New Orleans, La.

HARRY L. LAWS & CO., INC.
126 Carondelet Street
New Orleans 12, La.

THE HIBERNIA NATIONAL BANK
New Orleans, La.

LAMBORN & COMPANY, INC.
Whitney Building
New Orleans, La.

LEBOURGEOIS BROKERAGE CO.
823 Perdido Street
New Orleans, La.

THE NATIONAL BANK OF COMMERCE
New Orleans, La.

NATIONAL SUGAR REFINING CO.
Carondelet Bldg.
New Orleans, La.

PENICK & FORD LTD., INC.
National Bank of Commerce Bldg.
New Orleans, La.

ESSO STANDARD OIL COMPANY
(Louisiana Division)
P. O. Box 1250 New Orleans 10, La.

STANDARD SUPPLY & HARDWARE CO., INC.
822 Tchoupitoulas St.
New Orleans, La.

STATE AGRICULTURAL CREDIT CORP., INC.
837 Whitney Building
New Orleans, La.

WHITNEY NATIONAL BANK
New Orleans, La.

Index for Vol. 36-37 is found in
Vol. 38, no. 7, p. 82

BOUND BY
HNM